The Relevance of Japanese Finance and its Main Bank System

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This paper is the final draft for the joint research project on the Japanese Main Bank System and its Relevance for Developing Market and Transforming Socialist Economies, undertaken under the auspices of the World Bank EDI Program for the Study of Japan's Development Management Experience, the Center on Japanese Economy and Business at Columbia University, and the Economy of Japan Program at Center for Economic Policy Research of Stanford University. This paper represents the views of the author and not those of the sponsoring institutions.

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What lessons can be learned from the Japanese experience with its main bank system and, more broadly, its financial system? How relevant is that experience for the developing market economies? For the transforming socialist economies? These are the central themes of this chapter, which explores a range of key generic issues in the design of good financial systems for developing market and transforming socialist economies in light of Japanese experience. Consonant with the objectives of this book, a major focus is on the main bank system in its heyday, namely the rapid growth era from the early 1950s to the early 1970s; and on placing the main bank system within the overall architecture of the Japanese financial system, its structure and the government's financial policies. \1

A comparative analysis from the perspective of the banking systems of other countries is provided by this Part of the book. The next chapter, in providing an analysis of the relationships among large German banks and large industrial corporations, makes clear that while Japanese and German banking are broadly similar (hence the "Japanese German model" of banking-based finance), they differ significantly in certain details, especially in regards to corporate governance. The remaining five chapters illuminate the issues of finance and banking from the perspectives and in light of the experiences of three major developing market economies -- Korea, India, and Mexico -- and two transforming socialist economies

1 This essay is based upon the chapters in this book and upon a wider body of research on the Japanese financial system. I am especially indebted to the other authors and participants in the project workshops for their substantive comments. I particularly acknowledge the writings over the years of Juro Teranishi; the recently completed project on the financial development of Japan, Korea, and Taiwan (Patrick and Park, 1994); and the World Bank World Development Report (1989) and its various more recent Working Papers. Nonetheless, this essay is my assessment and evaluation, and no others are responsible for the judgments presented here.

-- China and Poland. These country studies utilize and build upon the thorough, detailed studies of the Japanese main bank system in Part I.

The next section of this chapter addresses general analytic concerns. The basic objectives of any nation's financial system are to provide a stable, reliable, safe means of payment; to encourage and facilitate real saving; to mobilize those savings in financial form; and to allocate them efficiently and effectively to finance the most productive investment projects. A hierarchy of issues must be considered in the creation of a good financial system. They can be classified at three levels of analysis, while recognizing that interactions among issues are pervasive and important. At the most fundamental, systemic level are issues about the basic nature of the economy and of macroeconomic policy. At an intermediate level are issues concerning the architecture of the financial system and financial policies. At the micro level are issues concerning the nature of the banking system and the effective operation of banks. How Japan has dealt with these, and in particular how the main bank system fit it, accordingly are discussed in the following three sections. The relevance, lessons, and transferability of the Japanese financial system, in particular the main bank system, to developing market and transforming socialist economies are addressed in the final sections of the chapter.

1 Analytical Issues

The approach in this chapter is to consider key generic elements in the creation of a good financial system and how Japanese policymakers, financiers, and markets have dealt with them, rather than arguing that the Japanese financial system, especially its main bank system, should (much less could) simply be replicated in other countries. Each developing market economy or transforming socialist economy (TSE) has its own specific circumstances, experiences, institutions and history. Given national differences, there is no single optimal financial system model for all countries at all levels of development.

Unlike Part I, where most of the discussion focuses on the Japanese main bank system in the context of the Japanese financial system and its evolution, the approach here is to appraise the Japanese experience in light of the basic structural, institutional, and policy problems of finance that most developing market and TSIs currently face. To a greater or lesser degree the problems have been inflation and macroeconomic instability; weak legal, economic and financial infrastructure; inadequate economic and financial information and its asymmetric distribution among economic actors; weak banking systems and capital markets; short supply of human resources with finance skills including credit analysis; financial repression; soft budgeting; and corruption.

Financial systems, like economies, evolve over time in response to changing economic circumstances and opportunities as well as socio-political conditions and objectives. The broad contours of the long-run historical pattern of financial evolution is common across countries. At the earliest stage of development saving is done by investors; finance is internal. Indeed, internal finance continues to be the dominant source of industrial finance even in the most advanced economies. However, its overwhelming role is attenuated over time as savers and investors increasingly become different entities and as entrepreneurs and firms develop new profitable investment projects larger than can be financed internally.

In all economies banks have been and continue to be the dominant external source of business finance, certainly for the entire sector of smaller enterprises and even for many large companies. At some point -- and timing differs significantly among countries and financial instruments -- large companies obtain financing through the issuance of equity, bonds, and commercial paper in capital markets. Whether first to create institutions and pursue policies favoring bank loan finance or securities market finance, or to do both simultaneously, is a key issue in designing financial systems. If priority is given to banking, as has been the historical experience of financial development for many countries, when and how is such preferential treatment brought to an end? We have two historical models. In the Anglo-American experience, securities markets developed early. Postwar Japan and Germany are major examples of the banking-based model; securities markets have developed only recently.

Wise policymakers consider a range of alternative systems and institutional arrangements, and learn from the successes and failures in the actual experiences of other countries as well as from theory. To narrow one's scope and perspective can lead to making wrong policy choices. Thus, there is always the danger of giving excessive weight to the comparative experience one knows best. To what extent are East European economies heavily influenced by continental Western European models, or by advisers intellectually grounded in the Anglo-American model? Are Korea, Taiwan, China, or Southeast Asian nations seeking guidance predominantly from the Japanese experience?

1.1 What Periods of Japanese Financial Development are Relevant, and for Whom?

Is the Japanese economic and financial development experience so distinctive as to be considered unique? The answer is certainly no. The differences in the Japanese financial system are ones of degree, not of kind. Japanese policymakers have had to deal with the same major issues in developing the architecture and operations of its financial system as have policymakers in all market economies.

The different stages of Japan's evolutionary financial development offer different insights -- lessons -- and hence are differentially relevant for countries at various stages of market development. (See particularly the chapters by Teranishi and Aoki.) Japanese policymakers and financiers in the late nineteenth century established a modern financial system by adopting and adapting Western models and institutions. Initially entry was very easy, with low minimum capital requirements and virtually no prudential regulation or protection of deposits; by the first decade of the twentieth century some 2300 banks were in operation, mostly small, local, unit banks established by industrialists seeking to finance their enterprises. The successful growth of the banking system was marred by occasional bank runs and financial panics, culminating in the dramatic banking crisis of 1927. Greater government regulation, higher minimum capital requirements, consolidation, and the increasing size and market share of a few large banks resulted.

World War II brought further regulation, consolidation, and control. That experience, especially coupled with the immediate postwar experience of dislocation, high inflation, conversion from munitions to civilian goods production, huge overhang of bad debts for both companies and banks, and efforts to create a democratic society, is particularly relevant for the currently transforming European socialist economies. Insights, even lessons, can be derived from how Japanese policymakers dealt with the same sorts of problems as those currently facing the TSEs. (See the chapter on Poland by Hoshi et al.) Nonetheless there are important differences as well. Perhaps most important is that postwar Japan had several generations of prewar experience in a free market.

private enterprise system in which financial institutions became well developed and considerable human resource skills were built up. Moreover, Japan was under Allied occupation and institutional and other change could be more readily imposed, subject of course to the willingness of the Japanese to accept and maintain those changes, especially once independence was restored in 1952.

The subsequent high growth era was the heyday of banking and of the main bank system. It was the period of exceptionally rapid real GNP growth, averaging close to 10% annually, as private business investment and private saving increased dramatically absolutely and as a share of GNP. Corporations needed ever increasing amounts and proportions of external finance, and banks provided the great bulk of it. It was an era of modest financial repression in which real interest rates were positive but low, and of relatively limited programs of directed credit for government defined key activities and sectors. In many respects the main banks came to epitomize, or symbolize, Japan's economic system in the high growth era. And it is this era that probably is most immediately relevant for developing market economies and, as their transitions proceed, for TSEs as well.

By the late stages of the high growth era -- the early 1970s -- both the real economy and the financial system had grown, evolved, deepened in structure, and became institutionally stronger. The balance of payments constraint on growth had been lifted. Inflationary pressures had been successfully contained for more than two decades. Japan's export capacity had increased rapidly and the yen, initially overvalued, had become undervalued. Loan interest rates had been positive throughout, financial markets had come to work increasingly well, and the proportion of directed credit for developmental purposes, never high in aggregate, had declined substantially. Financial institutions and their management capabilities -- and the associated accounting, auditing, and reporting infrastructure -- had become quite well developed. The system was more than ready for further financial reform: deregulation, liberalization, a widening range of financial instruments and markets, the final termination of foreign exchange controls over capital outflows and inflows -- in other words, the transition (some would say overdue) to a competitive financial system (World Bank, 1989, p. 127). This took place gradually and piecemeal from the mid-1970s, and in some respects is yet to be completed.

Japan's subsequent experience as an advanced industrial economy in the sustained good growth era from the mid-1970s to the early 1990s is also of considerable relevance. Economic growth slowed, though to rates still above the OECD average. For the first time ex ante private saving exceeded ex ante private investment and the financial system was flush with funds. In the second half of the 1970s the government resorted to fiscal stimulus through budget deficits and large government bonds issue, thereby bringing about the development of a secondary bond market. In the 1980s Japan developed a huge current account surplus, thanks in part to the overvalued dollar. The government during this period implemented a gradual, piecemeal program of financial deregulation. Financial repression ended and greater competition ensued in most financial markets, with new stresses on and opportunities for individual financial institutions. Securities markets burgeoned as many large listed firms found bond and equity issue a less expensive source of external funds than bank loans. While the domestic corporate bond issue market remained relatively underdeveloped and restricted, Euro-market bond issues thrived. During this period the main bank system evolved and became embedded in market based finance.

These trends were seriously exacerbated by the asset bubble -- the great boom in the stock and land market prices -- between 1985 and 1990. In retrospect this was a period of system-wide failure. The speculative mania was fed by the mistaken but widespread belief, shared even by conservative banks and government regulators, that asset prices would not decline seriously or for any sustained period of time. During 1985-90 banks and other financial institutions lent on ever-easier terms for purchase of ever higher-priced land and for real estate development projects. The bursting of the bubble from 1990 has left in its wake the difficult problems of a serious bad debt overhang for the entire banking system, the first since the late 1940s.

Japan's long historical experience as a successful developing market economy clearly is directly relevant for other developing market economies which, after all, have gone through their own banking and financial market development. The TSEs however, have to create the full panoply of private ownership, capitalist market institutions, incentives, and behavior virtually from the ground up. While they face tremendous difficulties and obstacles in virtually creating a new financial system rather than modifying an existing one, the TSEs can learn much from the Japanese model and experience both in determining their basic financial architecture and policies and in dealing with their especially important immediate problems of inflation, overhang of bad debts and bank insolvency, soft budgeting, and lack of human resources.

At the same time, several cautionary notes about the Japanese experience should be sounded for those seeking lessons. First, the fact that a particular set of policies and institutional arrangements worked well in Japan does not mean they were optimal. Second, Japan's extraordinarily successful economic performance does not mean that everything was done right. Third, the Japanese model cannot simply be applied directly or simply; it must be adapted to each country's own requirements. Fourth, what counts is substance, not form; mere adoption of institutions or policies without appropriate incentives and regulatory arrangements will not succeed.

1.2 Fundamental Characteristics of the Japanese Main Bank System

The nature, operations, effectiveness, and evolution of the Japanese main bank system are described and analyzed in rich, nuanced detail in Chapter 1 and the other chapters of Part I. However, it is useful to repeat here its key features, albeit in stylized form, as an introduction to and reference point for what follows. The discussion focusses on the high growth era of the early 1950s to the early 1970s. The main bank system is based on the special relationships that developed between Japanese large banks (predominantly the twenty-odd city banks, trust banks, and long-term credit banks) and large industrial corporations, notably the 1000 or so then listed on the stock exchanges. While the main bank system is conceptually different from the six financial keiretsu business groups (Mitsubishi, Mitsui, Sumitomo, Dai-ichi, Fuyo, and Sanwa), in practice most of the main bank relationships are with their banks or with the Industrial Bank of Japan, the largest of the three private long-term credit banks.

Relationships between bank and borrower are a general characteristic of banking in all countries, since repeated transactions and accumulated knowledge of borrower creditworthiness are always important. The Japanese main bank system is a highly developed, more intensive, closer and in certain other respects distinctive form; it can be regarded as the epitome of relationship banking. The system was not a deliberate creation of special government policy; it was an institution which developed and evolved as an effective response to the costs of monitoring in an environment of highly imperfect information and to the overall institutional framework and set of government financial policies.

The main bank-corporate client relationship is multidimensional. In stereotype the main bank typically is the largest single lender to its corporate client (15-25% of loans) and its largest shareholder among banks (close to then 10% ceiling). Further, it is the main clearing bank for payment settlement accounts, trustee for collateral for any bonds issued, major beneficiary of foreign exchange and other fee-based business, and provider of (financial) management human resources. It is the major monitor of the client firm's management and performance. It takes the lead in arranging de facto lending syndicates with other banks and financial institutions for its clients. Importantly, it takes special responsibility for rescuing and restructuring a client firm in distress, taking on costs greater than its formal exposure; this is the most distinctive feature of main bank functions. Unless the situation appears to be virtually hopeless, the presumption -- of the main bank, of the client, and of the business, financial, and public policy communities -- is that the main bank will rescue the firm through restructuring or merger rather than liquidating it. These relationships, arrangements, and commitments are based not on legal contracts but on a history of understandings and expectations, the build up of (investment in) trust, and reputational effects.

The essence of the main bank system has lain in its strong information collecting, related monitoring capabilities, and management consulting. To that end banks have established systems and built up human resources, both in their personnel system of permanent employment, on-the-job training, and rotation in assignments, and in the development of special teams dedicated to manage the relationship with each major corporate client. Monitoring is of course costly, but the main bank did not directly charge to cover the costs. Neither did it receive higher interest rates. Rather, it has been compensated by preferential access to the client's transactions deposits and to the deposits of its employees, subsidiaries and subcontractors, and preferential provision of fee services and the handling of foreign exchange transactions in less price competitive markets.

From the perspective of the borrowing firm, the main bank has been a secure source of loans when credit was tight, as it was most of the time during the high growth era even for large firms; a source of financial information and expertise; and a friend in times of distress. The firm was prepared to provide its main bank considerably more information about its ongoing and proposed activities and plans, and subject itself to ongoing monitoring, than it was to other potential monitors. At the same time it maintained good relations with several other competitor city banks as a hedge against opportunistic behavior by its main bank. It held a modest proportion -- up to 1% or so -- of the equity of its main bank; stable cross-shareholding solidified the relationship and turned out to be a good long run financial investment, despite very low dividend rates, as share prices have appreciated substantially despite the decline since 1990. In the high growth era large firms grew extraordinarily rapidly, 10-15% a year on average. They increased their direct investment even more rapidly, far beyond their capacity to finance internally despite very low dividend pay out ratios. They invested a lot, saved a lot, borrowed a lot, and increased financial assets (compensating deposit balances, trade credit, cross-shareholding) a lot.

The stylized facts, as well as theory, suggest the main bank system was quite efficient in two major respects. First, through investment in monitoring, main banks were able to increase information and improve credit evaluation, thereby reducing loan risk premia; and they probably improved corporate management performance by providing incentives not to shirk. The main bank system accordingly reduced the agency costs of external finance, overcame problems of imperfect information and its asymmetric distribution, and made it possible for firms to overcome the liquidity constraints of reliance on internal financing. The system enabled banks to diversify portfolios by being main banks for some large corporations and participants in a syndicate of lenders to others.

Second, the system reduced the costs of reorganizing and restructuring firms in distress; there is considerable case study evidence of this. Rescued firms were able to produce, sell, and invest more than similarly distressed firms without a close main bank relationship. Japanese costs of restructuring large firms were significantly lower than for distressed American firms using the bankruptcy procedures of the United States. Japanese bankruptcy laws are credible and relatively strong, including removal of top management; the possibility of bankruptcy certainly acted as a deterrent, encouraging quick settlement on terms negotiated with the main bank. In the high growth era there were only a few clear-cut instances of firms that should have been liquidated but were bailed out -- referred to as soft budgeting problems or Type 2 errors.

There is much less evidence on the effectiveness of (interim) monitoring of firms in the ordinary course of business. Some practitioners indicate it was quite effective; others say it was frequently pro forma and routine, increasingly so as time passed, relationships were established, and firms prospered. Yet there have been a number of cases of quiet restructurings in less extreme situations, on terms not made public. The post bubble era of serious bad loan problems is imposing high costs on many banks; the speculative myopia of the late 1980s overwhelmed what previously had been effective main bank monitoring systems.

The Japanese main bank system is not a panacea. It has weaknesses as well as strengths. The main bank relationship is private and participants, not surprisingly, are secretive about the specifics. The regulatory authorities have used administrative guidance and informal communication with banks; the degree of public disclosure has been limited. The cozy relationships between regulators and banks were based on preferential access to information and mutual trust, not to be shared with outsiders. The entire financial system is appropriately characterized as opaque. Thus, there are few careful, detailed empirical studies of the costs and benefits of the main bank system.

A serious problem has been the potential collusive exercise of oligopolistic market power by the large banks, both as main banks and more generally as financiers of big business. The evidence is mixed, but it appears there was a substantial degree of competition among the dozen or so city banks. Relationship banking provides insider access to information for lenders; the main bank system increased that degree of access and hence the possibilities of exploitation for institutional or personal benefit. Corrupt behavior in lending or other decisions by bankers or the regulating officials has been the exception. Despite some notable, indeed flamboyantly scandalous exceptions, there is little evidence that this was a serious problem overall. The system was basically honest.

2 Systemic Issues and Macroeconomic Performance

The most fundamental question is what kind of economic system a country wants. The assumption here is that policymakers in developing market and transforming socialist economies, like Japanese, are committed to a predominantly private enterprise, free and competitive market economic system for goods, services, labor, land, and capital, including finance. Yet many economies are reluctant to give up state ownership, particularly of "strategic" sectors however defined but often including the banking system (see the chapters on India and China). This is a key issue for TSEs, but has been important in many developing market economies as well (see the chapters on Korea and Mexico).

What is a country's development strategy: export oriented versus import substituting? What are the respective roles of domestic saving and foreign borrowing? What is the nature and degree of industrial policy, however defined? An open economy -- the free international flow of goods, services, and capital -- may be an ultimate objective but it is typically far from current reality. How quickly should an economy be opened, and in what sequence? An autarchic Japan benefited from being forcibly opened to free trade in 1859. It also probably benefited from import protection and capital outflow restrictions in the early phases of the postwar high growth era of rapid domestic market expansion and government-encouraged strong competition among Japanese firms, many of them new entrants.

Two further policy issues are of systemic importance. First, macroeconomic stability -- especially reasonable price stability -- is essential for the effective and efficient functioning of a financial system and, while the evidence is mixed, for overall economic performance as well. Second, the establishment of institutions to support the market economy -- particularly the legal system and information systems of accounting, auditing, disclosure, and transparency -- is essential. Who monitors companies, banks, and other economic players, how, and how well? A central theme of this book is that the main bank system of monitoring well met the needs for information prior to the establishment of adequate information systems. Efforts to achieve macroeconomic stability, build the institutional support structure, and create financial institutions are likely to be going on simultaneously, particularly in TSEs. They are all requisites for a good financial system.

2.1 Japan's Economy and Finance in the High Growth Era

Japanese economic growth in the two decades beginning in the early 1950s was extraordinary, averaging close to 10% annually. But it was not a miracle; it can be rather well understood and explained in terms of standard economic factors, supportive government policies, and an improving and expanding international environment. Control over inflation, price stability, and a fixed exchange rate were fully accepted as the macroeconomic requisites for successful economic and financial growth. In the early to mid 1950s Japan succeeded in overcoming the overwhelming economic problems of the early postwar period: high inflation, shift to civilian goods production, war damage bottlenecks, reconstruction. Moreover, it established or solidified its political, social, and economic institutional structure. These — especially macroeconomic stability — were the foundations for the sustained spurt of rapid growth, which no one anticipated and in the early years did not believe could be sustained. Given Japan's negligible natural resource base, growth was founded on rapid industrialization, and the development of manufacturing firms in virtually every (civilian goods) industry as the industrial structure deepened. (Standard analyses in English of Japan's economy and economic performance in the high growth era include Patrick and Rosovsky (1976), Nakamura (1981), Kosai (1986), and Yamamura and Yasuba (1987).)

As surprising as it seems today, Japan in the mid-1950s was classified as a less developed country because of its low income per capita; it graduated to developed country status only in 1964. However Japan differed from other low-income countries in that it had a labor force at least equivalent in education to Western Europe's, a sustained prewar experience of successful economic development, and substantial numbers of managers, engineers, and technicians capable of absorbing foreign technology. Its technological gap behind best known practices was substantial. Sustained very rapid growth was achieved by firms effectively utilizing the increasingly educated and skilled labor force, importing huge amounts of foreign technology, and engaging in unprecedentedly rapid plant and equipment investment in new, more productive capacity.

Two related issues in interpreting Japanese experience remain controversial even among specialists: whether growth was state-led or led by private enterprise; and whether industrial policy was successful or not. My judgment is that while the state played a significantly constructive role, the engine of Japan's successful industrialization was private business entrepreneurship and investment; without this, government support and intervention would have been ineffective, if not counterproductive. The results of industrial policy were mixed: some industries were promoted and became globally competitive, others did not; the success of many winner industries was due primarily to business leadership and the evolution of comparative advantage -- from labor intensive products such as textiles to medium skill, medium tech industries such as automobiles and consumer electronics -- not to a differentially supportive industrial policy. For general discussions of industrial policy see Johnson (1982), Patrick (1986), Dore (1986), Komiya et al (1988), and Okimoto (1989); for industry specific studies see Samuels (1987), Friedman (1988), Anchordoguy (1989), and Genther (1990).

Certainly the government role was important. It pursued an investment encouraging macroeconomic policy mix of restrictive fiscal policy and expansive monetary policy. The government budget was essentially balanced; there was virtually no new net government debt issue until the mid-1970s. Inflation had wiped out the wartime government debt, and during the high growth era government debt as a share of GNP was low. One by product was there was no secondary market in Treasury bills or longer term government debt.

The government provided a supportive environment for private business industrial entrepreneurship, including the necessary physical infrastructure (utilities, transportation, communications). There were no state enterprises in manufacturing aside from cigarettes and other tobacco products, a monopoly for revenue purposes. Importantly, following postwar reconstruction the government gave highest, indeed almost sole, priority to economic growth as the solution to almost all problems. It did not compete with private business for resources, the government sector was small, and social costs of rapid industrialization (air and water pollution, urban congestion, lagging improvements in housing) were allowed to accumulate until the early 1970s. The development strategy was to encourage broad based industrialization in competitive domestic markets. It encouraged new domestic entry but continued the early postwar protection of industry against import competition or direct investment in Japan by foreign multinationals.

"Export and Save" was the slogan on a huge banner across the entrance to the Bank of Japan in the 1950s and '60s. Even so, like the United States but unlike most rapidly growing economies, Japanese postwar economic growth has been predominantly driven by domestic market demand. Exports have never been more than 10-15% of GNP. This reflected the size of the potential domestic market in a country whose population was twice that of any Western European country. At the same time, in the high growth era imports of machinery, equipment, and raw materials were essential and the balance of payments became the operative constraint. In that respect exports were vital to pay for essential imports, rather than representing an export led growth strategy. In the world capital market conditions of the 1950s and '60s Japan was not able to finance a current account deficit by heavy foreign borrowing, unlike Korea and other countries in the 1970s.

One of the most noteworthy features of Japan's successful growth performance was the tremendous increase in household saving as a share of family income and of GNP, peaking in 1973 before declining gradually since then. Nonetheless, while burgeoning investment demand was almost always straining against domestic saving constraints, this showed up from time to time as a current account deficit rather than high inflation. The fixed exchange rate -- taken by policymakers as a given until 1971 -- and the persisting allergy against inflation engendered by the early postwar traumas made macroeconomic control of inflation essential.

Rapid economic growth was and is a virtuous circle. It justified, by making profitable, the rapid expansion of productive capacity by firms and generated demand for new projects and products. It increased the value of new projects and investment in them. It meant that even marginal projects were not outright failures; the instances of large firm bankruptcy or restructuring were relatively few and the costs limited. Many new small firms were continuously being created and many of them failed, most sooner rather than later; both entry and exit rates for small firms in Japan have been high relative to the United States and other industrial countries. Rapid growth generated high saving rates by households and corporations. It generated rapid increases in real wages, and consumption, thereby providing a social rationale for low interest rates on saving deposits. However, the slowdown in growth rates since 1973 has had the opposite effects. Over time firms prospered, grew more powerful and competitive, and became increasingly independent of government influence. Japan's export success, commensurate with its domestic growth, made it possible to reduce import barriers, and over time that has taken place -- albeit primarily in manufactures and to a significant degree in response to foreign pressures.

2.2 Some Important Institutional Features

Japan like other countries has a private enterprise, private ownership, market economy; like them, it also has its own specific features of capitalism. I briefly consider several as of particular relevance for understanding the Japanese financial system. These include reliance on business relationships; various types of business groups (to which the term keiretsu is typically loosely applied); and the high quality of the central government bureaucracy, especially those encouraging, supervising, and regulating the financial system.

One important feature of the Japanese economy is that many markets are not impersonal, arms length, spot markets. They are moderated by relationships among market participants founded upon the building and maintenance of trust through repeated transactions and honorable (non opportunistic) handling of unanticipated situations. In the Japanese ideal, institutional relationships are expected to continue for a very long time — for practical purposes the game is usually assumed to go on forever. Relationships are multidimensional, complex, and subtly nuanced. Although built upon personalistic relationships, they transcend their implementation by specific individuals representing the partners.

Relationships are reflected in labor markets, subcontracting, buyers and suppliers, brand loyalty, and in banking, epitomized in the main bank system, as well as other financial services. Such relationships are characteristic of business in all economies, so the matter is one of degree not of kind. It is commonly assumed, though solid empirical evidence is limited, that business based on relationship arrangements and networks is more extensive and intensive in Japan than in the United States.

A system of economic transactions in which relationships are important has both efficiencies and inefficiencies. Japanese seem to have maximized those efficiencies while limiting the inefficiencies. Relationships enhance the degree and reduce the cost of access to information and monitoring. Relationships require an investment of resources into what became relationship-specific sunk costs. They are created over time since they have to be built upon trust engendered by repeated experience; trust is conditional upon the behavior and performance of the partners. The payoff is that relationships increase the return on relationship-specific investments (such as subcontractors designing an auto part for a particular model, or a main bank loan) by enhancing confidence that the partner will not behave opportunistically. Relationships overcome some of the inefficiencies in a spot market arising from imperfect, asymmetric information such as underinvestment in specific assets due to failure to safeguard against opportunism, or overinvestment due to multiple sourcing or duplication of monitoring effects. It is also argued that supplier buyer relationship systems overcome bureaucratic diseconomies within vertically integrated firms. Relationships provide an effective mechanism for dealing with uncertainty, unanticipated changes of circumstances (states of nature), since it is impossible to write, much less implement, a perfectly complete contract.

Relationship systems can also result in serious inefficiencies and social costs. They are essentially exclusive insider systems; entry by outsiders is difficult. They are murky and opaque, not transparent; they create opportunities for fraud and abuse of power. A relationship system is subject to personalistic objectives such as nepotism, disproportionate benefits to particular cliques, and other non-efficiency-based corrupt behavior. Firms in the same industry can establish relationships, often through industry associations, to engage in oligopolistic or cartel-type behavior. It is difficult to terminate relationships; reciprocal obligations built up over time may result in Type 2 errors (continuation of support well beyond rational assessments).

In many societies the social costs of relationship systems far outweigh their efficiency gains. Yet it appears this has not been the case in Japan. Why? The sanctions against and penalties for abusing trust are high. The most important sanction is the competitive marketplace. If a relationship becomes persistently less efficient than alternatives, eventually it will wither away. The discipline of the marketplace is reinforced by the competitive, ambitious drive of many Japanese individuals and institutions. The incentive system rewards good performance and makes poor performance embarrassing and shameful, as well as economically costly. Those perceived as not living up to the obligations of existing relationships suffer tremendous loss of reputation, making them less reliable partners for any future business. Reputational costs are reinforced by the high value placed upon status.

Many Japanese apparently approach relationships conditionally, with a healthy degree of skepticism and latent mistrust. It is not accidental that companies simultaneously seek a main bank relationship and in aggregate borrow most of their loans from other, frequently competitor, financial institutions.

And it is not accidental that main banks monitor their major clients, and indeed that partners in all relationship arrangements engage in some degree of ongoing monitoring of each other. Nonetheless, to develop good, strong relations participants must regard each other as trustworthy, and to be willing to rely upon informal agreements rather than formal contracts for much of the conduct of business. It is typically assumed that whoever one does repeated business with is trustworthy. And the elite central government bureaucracy has been deeply trusted, at least until recently.

The various types of keiretsu business groups (financial, vertical, enterprise, distribution) embody relationship arrangements among independent but affiliated companies. There is an extensive literature on keiretsu; see, for example, Aoki (1988) and Gerlach (1992). The six city banks with the largest number of main bank relationships are core members of the Big Six financial keiretsu: Mitsubishi, Mitsui, and Sumitomo, formed out of prewar zaibatsu; and Dai-ichi, Fuyo, and Sanwa. However, the main bank system is not the same as the Big Six keiretsu; other large banks also have main bank relationships. In particular, the Industrial Bank of Japan, the largest long term credit bank, has had as many main bank relationships with listed companies as the average Big 6 city banks; with its own business group of affiliated companies, it must be included as a major player in the main bank system (see the chapter by Pacher).

While all core members of a particular financial business group have the member bank as their main bank, the bank also has a main bank relationship with other large firms and, through the syndication process, the firms often borrow less from their keiretsu financial institutions (the main bank, trust bank, insurance companies) than they do from non-members. While there may be benefits for the main banks in having a keiretsu system, certainly the application of the main bank model in other countries does not require the formation of affiliated, autonomously managed, groups of business firms.

Three further aspects of Japanese industrial organization have some relevance for the operation of the main bank system. First, stock ownership in almost all large industrial corporations and financial institutions is widely dispersed; ownership is separated from control which, in normal circumstances, is exercised by a self-perpetuating autonomous professional management. Management's stated goals are to benefit all its stakeholders, including importantly its workers, not simply to maximize shareholder value. Corporate governance is exercised through the main bank system, and control can shift from management to the main bank in times of distress. Second, take over of companies has not been a major instrument of corporate governance or of company diversification into unrelated product lines. Mergers have been of weak firms into stronger, usually mediated by the main banks. Third, particularly in the rapid growth era but even subsequently, firms tended to stay within their own narrowly defined industry; American-style conglomerates did not emerge. A major reason was that rapid growth -- first of domestic markets and then the ability to compete in foreign markets -- absorbed the management capabilities of enterprises, and kept them in the industries they knew best.

Importantly, Japan has an excellent system of sound central government administration. Over time it developed an elite bureaucracy that is generally respected, trusted, and in whom politicians have vested great power because of their presumed capability, honesty, and identification with the national interest (or at least each Ministry's avowed perception of the national interest). Those on the fast track in the Ministries are able, recruited from the few elite universities, and promoted from within; only the Minister and parliamentary Vice Minister are outsider, political appointments. \2

At the apex is the Ministry of Finance which, among other responsibilities (such as making the budget and designing and implementing the tax system) oversees, promotes, guides, and supervises, and otherwise establishes and monitors the rules of the game for the financial system, and especially the banking system. Trust and confidence in the Ministry of Finance and other economic ministry bureaucrats have had important implications for the financial system, especially in the high growth era when bureaucratic power was greatest. Everyone believed that the Ministry of Finance and Bank of Japan guaranteed bank safety. Close supervision (monitoring) would prevent mismanagement, excessive risk-taking, fraud. The system was believed in even though it was opaque and government officials have relied on administrative guidance rather than law in composing and implementing rules and affecting behavior. The sanctions against poor performance, much less corrupt behavior, by government officials were severe:

2 See the papers prepared for the World Bank Workshop on the Roles of the Civil Service in Japanese Economic Growth (1993). For a rational choice approach see Rosenbluth (1989) and Ramseyer and Rosenbluth (1993).

loss in the promotion game, reduced post retirement job opportunities, at the extreme, disgrace -- all in a quite imperfect labor market for senior managers and government officials.

The process allocating bank credit to specific firms in Japan has been based on objective criteria, without serious problems of direct bureaucratic intervention. Known instances of direct bribery and corruption of government officials to influence specific loan decisions are very few. While some undoubtedly were not discovered, and others hidden from public view, corruption has not been a serious problem for government administration of the financial system. It has been basically honest and effective, especially in comparison with many developing market economies and ISIs.

In practice the Ministry of Finance and Bank of Japan have been insulated from the direct corruption more pervasive in politics. \3 This is not to say they have complete autonomy. They certainly were responsive to the electoral and other needs of the Liberal Democratic Party politicians in power; the "iron triangle" of cozy, mutually supportive, and beneficial big business (including finance), LDP politicians, and government bureaucracy relationships has been an important reality. As in every country, Japanese banks have had a strong vested interest in shaping the regulatory system and government financial policies to their benefit. Their relationships were based on general support of the system, not on specific favors. The city banks were among the largest legal contributors to the Liberal Democratic Party, and they undoubtedly made contributions directly to individual political leaders as well.

3 To be elected and stay in office, politicians have had to maintain and somehow pay for a large staff, and are expected to make gifts of $75-150 to the families of constituents on the occasion of each birth, death, or marriage. They raise much of these funds through business contributions which are frequently related to regulatory restrictions (such as the Sagawa trucking license scandal), government purchases (notably the system of rigged government construction contracts, termed dango), Tax tax enforcement (such as small business evasion of income taxes), or stock market scandals (the Recruit case). That these arrangements are generally tolerated so long as they stay within limits suggests a series of implicit social compacts which can only be addressed through comprehensive political reform.

Public confidence in the regulatory authorities and in the banking system and the securities industry was shaken in the early 1990s when a series of financial scandals surfaced in the aftermath of the bursting of the stock and land price bubbles. These demonstrated not corruption but the apparent lack of competence of government officials in supervision, and their tolerance of sleazy if not outright illegal practices as interim measures in the process of financial institution adjustment to new market realities. In mid 1993 belief that the regulatory authorities would continue to protect the safety of the banking system, and especially depositors, remained strong but was more conditional than before; a few small banks thought to be in particular difficulty even had considerable deposit withdrawals.

3 Financial System Architecture and the Japanese Experience

The government designs the architecture of the financial system; the market gives its substance, fills its halls, and even alters the design itself. Government policy establishes the framework whereby system stability is maintained, and determines whether competition in financial markets flourishes or is emasculated. To the extent that market forces predominate, they bring about changes in structure as new financial markets, instruments, and institutions develop in response to market demand for them. Governmental authorities — the ministry of finance, central bank, financial institution supervisors — play a major role. At the micro level they oversee banks and other financial institutions with prudential regulation and supervision. But they do far more than that. They build and modify the institutional structure and hence the industrial organization of finance; they set and enforce the rules of the game.

Japanese policymakers in the early 1950s had to address the same issues of financial system structure and policy facing developing market economies and TSEs today. Once independence was restored in April 1952 Japanese policymakers had the freedom to alter, amend, or accept the existing structure, to create new institutions, and in particular to implement their own financial policies. This section addresses important issues of financial structure and policy for developing market economies and TSEs, and discusses how Japanese policymakers and decision-makers, public and private, have dealt with them. These include banking-based financial systems; universal versus commercial bank systems; bank safety; interest rate policy and financial repression; and long term and directed credit policies.

3.1 Banking and Securities Markets

A securities market based system and a banking based system can develop simultaneously while being of vastly differing significance in different time periods and for different players. Both require a set of prudential and administrative rules and regulations, in other words an appropriate institutional structure and administrative framework, in order to function effectively and efficiently. The important issue is thus whether the institutional structure, the incentives structure, and the rules of the game should discriminate substantially in favor either of banks or of securities markets; or whether they should be more neutral in order to let market forces determine the relative importance of each over time.

As a practical matter, until a late stage of economic development securities markets will not be the dominant source of business external finance for the corporate sector as a whole or probably even for large firms. Which financial institutions can most effectively and efficiently monitor borrowers is key. The economics of information collection and monitoring, and the reluctance of firms to subject themselves to significant disclosure, limit the demand for public securities issue. Equally important, there is a term mismatch between savers and investors; in relatively low income countries few individual savers are willing to take on the risks of impersonal securities investments or to make long-term commitments in financial assets. The risks are correctly perceived as higher in countries with recent experiences of inflation or substantial degrees of socio-political as well as economic uncertainty.

Many ISEs are seeking to privatize their mammoth state enterprises, often by widespread distribution of equity to individuals at low prices. Such programs will almost inevitably, and desirably, lead to the creation of stock markets to facilitate changes in ownership of the outstanding shares. That can have important advantages, such as increasing pressure to create adequate information systems and transparency and providing market-determined price information (signals) about yields and valuations. However, in the absence of overwhelming (and costly) incentives, it is unlikely that securities markets in ISEs will become a major source of new funds for listed companies in the foreseeable future. And it remains to be seen whether institutional investors (such as mutual funds) that do emerge will be more efficient and effective monitors than government bureaucrats (probably so) or bank managers (unclear).

The postwar Japanese financial system owed much to its early postwar, wartime, and prewar institutional heritage. The Ministry of Finance opted for a system of bank loan-based finance for industrial corporations. It used regulatory restrictions and economic disincentives to severely inhibit corporate bond issue and the development of a secondary market (see the Ramseyer chapter). Essentially only public utilities and long-term credit banks could issue bonds in any quantity, and this was done mainly through non-arms-length placements. Equity issue was expensive for management-controlled firms both because dividends were paid out of after-tax profits while interest payments were a deductible expense and because the prewar custom of new stock issue at par rather than market prevailed (well into the 1970s). The issuance of commercial paper for short-term finance was not allowed until 1987. Business, growing rapidly and always in need of new loans for working capital and fixed investment, had no choice but to borrow from banks.

The basic rationale for Japanese policymaker discrimination in favor of bank finance over corporate bond or equity issue lay in their perception that savers in the early postwar period wanted safe, liquid, short-term financial assets. The inflationary experience was too traumatic and recent; financial and real wealth was low and relatively equally distributed; the stock market had difficulty absorbing the shares released through the zaibatsu dissolution program. Moreover, only banks had bond underwriting experience and expertise from prewar, and the Occupation-imposed Article 65 of the Securities and Exchange Law of 1948, based on the American Glass-Steagall Act, separated banking and underwriting or dealing in securities. Only in the 1970s and '80s were the restrictions on corporate bond issue substantially eased, considerably later than was desirable. Nonetheless, these policies were an essential component of building a strong banking system during the rapid growth era.

3.2 Banking System Structure

Inasmuch as universal banking was prohibited under Article 65, the operative issue for Japan was what banking system structure would be most appropriate. What are the respective benefits and costs of a system founded primarily on nationwide branch banks or on larger numbers of local and regional banks? Nationwide banks may generate economies of scale, scope, and portfolio diversification, but local banks may be better able to monitor local borrowers than local branches of nationwide banks. Moreover, should commercial banks be expected to lend for all categories of borrowers, or is it desirable to have specialized financial institutions for agriculture and small business to overcome harmful market imperfections? In substantial part as a consequence of its historical evolution, Japan's banking structure was functionally specialized.

The Japanese financial authorities ratified and where necessary created a system of specialized financial institutions and segmented financial markets. \4 The dozen or so nationwide city banks, including the subset of six major main banks, were to provide short term and to some extent longer-term loans to big business. Local banks, mutual savings banks, and credit associations were to lend to medium and small firms. Agricultural cooperatives lent to farmers. The seven trust banks financed commercial real estate and industrial projects with longer term loans; the long-term credit banks made term loans to finance large enterprise fixed investment. The government established and owned financial institutions to finance priority activities. The largest and most important in the high growth era were the Japan Development Bank and the Export-Import Bank of Japan.

The Fair Trade Act of 1947 set a 5% limit on Japanese bank ownership of a company's shares, in contrast to the prohibition of ownership in US law and UK custom. However, once independence was restored the authorities amended the law, in July 1953, to allow Japanese banks to purchase up to 10% of a company's equity;

4 The most comprehensive description in English of the Japanese financial system institutions, markets, assets and liabilities, interest rate system, monetary policy has been prepared by the Bank of Japan and appears in Suzuki (1987). There are a number of good analyses available of the high growth era and of the subsequent period of deregulation, including the chapter by Hamada and Horiuchi in Yamamura and Yasuba (1987), chapters by Teranishi, and Kurosawa and Kitagawa, in Patrick and Park (1994), Cargill and Royama (1988), and Suzuki (1980 and 1986).

one purpose was to make bank client relationships closer and stronger (Teranishi, 1993, p. 22). However, institutionally and legally these relationships were even closer in the German system where, in addition to unlimited equity ownership, de facto control over proxies and representation on the outside Board have given German banks what are conventionally viewed as substantially greater powers, though Baums argues should powers were limited to a relatively small number of firms and were not really exercised (see the chapter on Germany).

The predominant source of funds for the financial system was deposits, particularly the saving deposits of households as their saving rates rose dramatically and there were few safe alternative financial assets. Even government financial institutions were financed primarily by private saving through their borrowing of post office savings deposits. Central bank credit sufficient to support money supply growth while maintaining price stability was provided through cheap loans and discounts to the city banks (more or less in proportion to their size), which in turn lent to large businesses or to finance exports, and purchased (on an allocated basis) bonds issued by the long-term credit banks, electric power companies and other utilities, and the small number of qualified corporate clients. Establishment of new bank branches was profitable since deposit interest rates were kept artificially low while the demand for loans was high. The Ministry of Finance controlled the number and allocation of branches, and used that as an incentive device to ensure bank compliance with its guidance. Saving was more widely dispersed geographically than large enterprise fixed investment, and the inter-bank call market, in which city banks borrowed substantially and persistently, reduced disequilibria in the segmented deposit and loan markets.

3.3 Banking System Safety and Stability

A basic issue, which certainly has shaped Japanese policymakers thinking, is how to maintain the safety and stability of the banking system. To what extent and how should depositors be protected? Should individual banks be allowed to fail? How can the moral hazard of excessive risk-taking by banks be overcome? To what extent do measures to promote safety conflict with the objective of enhancing financial market competition? Can high minimum capital adequacy ratios substitute for government guarantees in protecting depositors? These are major questions under debate in the finance literature. In my view high capital adequacy requirements, prudential regulation, pro active supervision, and transparency are collectively the appropriate policies. Government guarantees, explicit or de facto, not only raise moral hazard problems but increase the likelihood the government both will intrude excessively in loan decisions and other aspects of bank behavior, and will find itself committed, or unable to refuse to commit, to further loans to refinance failing banks or industrial companies (the soft budgeting problem).

The reality, however, is that, like early postwar Japan, banks in almost all developing market economies and ISIs are undercapitalized, have limited prospects for raising additional capital, and have serious bad loan problems, disclosed or undisclosed. The overhang of huge and still rising bad loans to state enterprises means that banks in some ISIs are insolvent. A solution of these problems through sustained growth sounds good but is ameliorative only. More likely they will be resolved, as was done in early postwar Japan, through a combination of de facto bankruptcies and restructuring, inflation (which reduces the real value of loans and deposits); sequestering of existing ("old") bank deposits and loans in order to start fresh with "new" deposit and loan accounts; cleaning up the bad debt overhang over time by writing off equity and "old" deposits to the extent necessary; and the revaluation of corporate real assets once inflation ends (or as it proceeds).

The hand of history has been heavy on Japanese financial policymakers, as for Germany, the United States, and indeed most countries. For its first fifty years Japan's modern banking system was highly competitive and lightly regulated, with easy entry and scant supervision. However, recurring bank failures and financial panics, culminating in the Banking Crisis of 1927, generated a strong regulatory commitment to banking system stability, safety, and orderliness that has persisted to the present. The postwar authorities conservatively created a system and pursued policies which in practice not only fully protected all deposits and depositors but prevented any bank from failing. Deposit insurance was not a factor; indeed a government compulsory deposit system was not established until 1971.

While serving as the lender of last resort, the monetary authorities did not want to create moral hazard disincentives or condone mismanagement. The policy approach was two-fold: to enact prudential regulation and carefully supervise banks, intervening in bank management when necessary; and to impose ceiling interest rates on deposits and loans with a sufficiently wide spread that even the most marginal bank, reasonably managed, would be profitable, since investment demand and hence demand for loanable funds was high (see the chapter by Ueda). The entry of new banks was prohibited. While relatively high minimum capital-asset ratios (10%) were required in principle, in practice they were very low, on the order of 2 to 4%; the other policies were sufficient to guarantee bank safety. Capital-asset ratios became an issue only as banking was deregulated and especially after major Japanese banks became significant international players, leading to the 1988 BIS capital adequacy ratio arrangements.

The banking system was indeed very stable and safe throughout the high growth era. No bank failed; a few merged. Realized loan losses were very low in part because loans were generally well collateralized but also because rapid growth resulted in few outright business failures of any significance. There were modest economic losses borne by banks as they rescued and restructured firms in distress, typically by reducing interest rates on loans and extending repayment schedules. Perhaps the most significant cost of the otherwise very effective policies promoting stability was that bank management, especially in small banks, became complacent, and was ill-equipped to operate very effectively in the more competitive financial environment deregulation has brought.

3.4 Low Interest Rates and Financial Repression

A key issue in financial development policy is whether interest rates should be determined by supply and demand in the marketplace or be set at low ceiling rates through government policy. Low interest rate policies reduce the cost of funds to investors and the return to savers, thereby providing incentives to investment and disincentives to saving. Under a policy-mandated low interest rate regime, demand exceeds the supply of funds and credit rationing becomes essential. Credit rents -- the difference between ceiling interest rates and market interest rates -- are created and somehow allocated among direct and indirect participants. The credit allocation process accordingly becomes distorted by political factors, personalistic considerations, rent-seeking behavior, and corruption. To maintain the system entry has to be limited, competition among financial institutions and financial instruments constrained, and capital outflows to foreign countries restricted. This is the standard description of financial repression.

Low interest rate (financial repression) policies have long been criticized on both theoretical and empirical grounds. \5 For almost all economies the lack of saving is a more severe constraint than lack of investment demand. To the extent savings are real interest rate elastic -- the evidence is mixed on marginal changes, but positive where large changes occur due to substantial reductions in inflation -- then low interest rate policies are counter productive. On the investment side, low interest rates create credit rents and distort credit allocation away from the most productive investment projects. Corruption in the distribution of credit rents occurs at two levels: that of individual banks or bankers, their borrowers, or regulators; and, as political economists have pointed out, the institutionalized corruption of the political system whereby credit rents become a significant source of finance for the political leadership.

The degree of financial repression is very important both as a policy matter and theoretically. There is no substantial theoretical case or empirical evidence that negative real interest rates enhance economic and financial development. Even with positive real rates the distortions can be large. As an illustration, assuming national credit outstanding amounts to 50% of GDP and the gap between ceiling and market interest rates is 10 percentage points, then the annual credit rents amount to 5% of GDP. These rents are redistributed from savers and taxpayers to those who obtain them. These static costs of credit rents rationing are surely smaller than the dynamic consequences of inefficient resource allocation.

A recent theme in the "new institutional economics" analytical approach is that a small degree of financial repression may, on net balance, be beneficial or even required in order to build financial institutions needed for economic growth. The analysis begins with the proposition, certainly well recognized by all practical policymakers, that institutions matter. In the real world of imperfect

5 The classic treatments are Shaw (1973) and McKinnon (1973); more recent analysis is provided by Fry (1988) and McKinnon (1991). The World Bank World Development Report (1989), especially chapters 3 and 4, is replete with discussion, examples, and data on financial repression and the costs thereof. For a comparative evaluation of financial repression in Japan, Korea, and Taiwan see Patrick in Patrick and Park (1994).

markets and imperfect and asymmetrically distributed information it is sometimes necessary to provide incentives (direct or implicit subsidies) to create and manage effectively appropriate institutions. A strong, effective, and safe banking system is essential in a very uncertain world to mobilize savings and to allocate credit to productive business uses.

Assuming that saving is interest inelastic, few alternatives to savings deposits are available, and depositors have a high preference for safety over yield, then low interest rates on deposits are an effective way to subsidize banks. Ceiling loan interest rates are designed in principle so that banks retain part of this subsidy through a wide spread and pass on part of it to borrowers. Such a banking system should be autonomous, objective, and rational in its loan decisions, subject to prudential regulation and supervisory overview. The degree of credit rent that borrowers obtain is based upon objective performance criteria (output growth, cost reductions, exports) as determined by industrial policy. In this view business credit rent seeking induces growth-seeking outcomes (performance-indexed rent-seeking behavior). In this view, the degree of financial repression should equate at the margin its institution-building and allocative benefits and its saving disincentive and rent-seeking costs, and should be decreased as institutions become stronger.

The early postwar development of the Japanese banking system is put forth as an outstanding example of the success of a modest degree of financial repression (see most chapters in Part I, though Ramseyer takes exception). The argument is that the early postwar banks were fragile and required the implicit subsidies of low interest rates and wide spreads to build up internal reserves and become strong over time, and the entire system had been made safe by restrictions on entry and other means of implicit subsidy. Credit rents were used for institution-building and to provide incentives to appropriate corporate performance and in this sense were desirable.

Bank interest rate ceilings were operative mainly on the deposit side. Nominal ceiling loan rates set by law or agreement were neither comprehensive in coverage nor, more important, binding where they did apply. Banks required compensating balances and fee business against loans to raise stated interest rates above the ceilings, if not to completely market clearing levels. \6 Aoki amnong others has plausibly argued that some credit rents were captured by "well-performing" industrial firms since there was some variance in loan terms even among creditworthy borrowers; the micro evidence to test this proposition is, not surprisingly, very limited.

A considerable portion of the credit rents of regulation in the era of high business demand for funds accrued to banks. How did the banks allocate those rents? Certainly not to loan officers; borrowers were not able to obtain preferential access to loans by bribing them. Part went into bank profits (shared with the government as taxes and otherwise mostly retained as additions to capital); part went into higher salaries for managers of banks than for industrial enterprises; part funded management inefficiencies; and some modest portion went to very large depositors who also were able to evade ceiling interest rates (Patrick, 1966).

The rents created in the high growth era by low interest rate policies were relatively small, estimated to be 1.7% of GNP in 1966-70 and 2.4% in 1971-75 by Teranishi (1993, p. 29) and somewhat less by Ueda (chapter 3). While the main beneficiaries were large firms, and the banks themselves, the costs of financial repression were borne by depositors who received very low real returns and by small businesses which paid oligopolistically determined high interest rates.

Rent-seeking and corruption, individual or institutional, have not been a pervasive characteristic of the Japanese financial system, so distortion of credit allocation criteria were minimized. This is not because Japanese were necessarily morally superior, although the perception that Japanese banks, bankers, and regulatory bureaucrats in general are honest and responsible seems valid. Rather, credit rents from financial repression were not very large, while the sanctions -- regulatory, economic, and reputational -- were severe.

6 Suzuki (1987) estimates the effective loan interest rate during 1964-73 was 8-10% for city banks, and 9-13% for local banks. The GNP deflator rose at an annual average rate of about 2% prior to the 1973 inflation; while the consumer price index rose more rapidly (reflecting price increases in services), wholesale and export prices were very stable. Ceiling rates on savings deposits in real terms ranged between slightly positive and slightly negative.

For comparative "lessons", the important fact about Japan's policy of financial repression is that it was so modest and circumscribed in comparison with the experience of many developing market and transforming socialist economies. Official ceiling interest rates were perhaps several percentage points below market clearing rates; however, in real terms ceiling loan interest rates were positive and nominal rates were above those in world markets. More important, since banks circumvented ceiling loan rates the policies were effective mainly on the deposit side. The dramatic increase in savings nonetheless flowed into saving deposits both because of liquidity and preferential tax treatment and the lack of alternative low-risk financial or real assets. The greatest cost was that the cozy system of regulated, low interest rates and other components of financial repression persisted too long. Inertia is a powerful force, and it was not until fundamental structural changes in Japan's macro economy occurred in the mid 1970s that the shift to deregulation and liberalization brought financial repression to an end.

3.5 Directed Credit and Long-term Financing of Business Investment

Related to financial repression but analytically and empirically separable are policy issues of directed credit and the long-term financing of business investment. Should government policy make possible the provision of credit to selected activities or industries at below-market rates and with easy availability? If so, how should this be achieved -- through government or private financial institutions? Who should bear the costs of such credit subsidies? What activities should receive the benefit? Certainly a system of market-based interest rates without financial repression but together with subsidized rates for certain activities is feasible, as American experiences in subsidizing credit for housing, student loans, and the like demonstrate.

A case can be made that relatively cheap credit for exports is an efficient way to support an export-oriented development strategy, particularly where other policies or market distortions make for disincentives to exporting. Similarly, a case can be made for relatively cheap credit for infrastructure investment -- public utilities, transportation, communications -- where external economies are significant. The most controversial component of directed credit policies is toward selected "strategic" winner industries (or smoothing the adjustment of declining industries) — that is, industrial policy. Cheap credit is an important instrument for industrial policy, in part because this form of subsidy is politically attractive since it is not readily transparent.

The Japanese government had a clear, straightforward, and relatively simple economic development and growth strategy as a follower nation behind Western Europe and the US. Achieving this meant deepening industrialization as the basis of evolving comparative advantage and productivity growth; exports as the means to pay for essential imports, the balance of payments being the operative constraint on rapid growth; development of infrastructure to support industrial activity; and basic reliance on private enterprises and market mechanisms to carry out the strategy. Japan was to climb the development ladder by moving into ever more skill intensive, higher technology, and capital intensive industries in which entry of new firms was encouraged in order to create competition in domestic markets protected from imports. An important policy instrument was the directed use of credit.

Policies to provide preferential financing for exports had several dimensions. The Bank of Japan rediscounted short term export trade bills at a low rate based on the New York market. The city banks played the major role by lending to their exporting industrial clients and especially to the general trading companies and other trading companies that handled so much of the exports. The Export-Import Bank made longer term loans (the functional equivalent of supplier credits) on preferential terms to foreign purchasers of Japanese exports, especially of ships as well as machinery and other capital goods. The Japan Development Bank was created to support the development of targeted industries, and some of them were involved in export production. Overall, the subsidy involved in export credits was not large, and exports had to meet the competitiveness tests of international markets. The disciplinary role of the export strategy was important. Firms were judged on their readily observable export performance, so monitoring of performance was easy.

Industrial policy in the late 1940s and '50s targeted traditional basic industries — steel, coal, fertilizer, electric power, transport. This subsequently shifted to prospective winner industries (identified by the demand and industry structures of the United States and Western Europe) such as petrochemicals, aluminum, shipbuilding, commercial aircraft, and later on computers and semiconductors. The basic approach was to rely on large private firms to carry out the investment necessary to create a new, more sophisticated and more competitive set of industries, and for government policy to provide substantial incentives for key, targeted industries. A wide panoply of incentives were utilized; especially important were import protection, tax benefits, and preferential access to credit at below-average interest rates.

As in other countries, the Japanese government had two ways to shape the allocation of credit: it could lend funds under its direct control, and it could influence how private financial institutions lent theirs. Government lending was limited but of some significance; government influence over private lending was indirect, relying on the financial and incentive structures created rather than directly controlling the allocation of credit to specific industries, much less specific firms. The contrast with Korea is noteworthy, as discussed by Nam and Kim; see also chapters by Park, and Park and Kim in Patrick and Park (1994).

Certainly the banks and other financial institutions funding large enterprises were well aware of the government's industry priorities, and lending by the Japan Development Bank (JDB) and Export Import Bank provided signals regarding government policy. However, Ministry of Finance directives to banks as to what industries to lend to ended in the mid-1950s. The industrial patterns of bank lending were certainly broadly congruent with government industrial priorities, but this was because such loans were viewed as profitable and safe. It is noteworthy that bank lending was much lower to those few sectors deemed high priority by the government but judged by the banks as being less safe and profitable, notably ocean shipping. Indeed Teranishi (in Patrick and Park, 1994) and others (see JDB, 1993) stress that in even the high growth era in practice a significant proportion of government funding went to facilitate and smooth the structural adjustment process of industries in trouble or decline, to which banks were much less willing to lend, such as coal mining once oil became a cheaper energy source.

Most subsidized directed credit programs were carried out directly through government financial institutions. Theoretically, the government could have generated its loanable funds in a number of ways. In practice, it relied predominantly and increasingly on the allocation of postal savings deposits through the Ministry of Finance Trust Fund Bureau to government financial institutions. Financing by loans directly from the central bank or indirectly through fiscal deficits were adamantly rejected since that had been the major cause of the postwar inflation. Financing by running a government budget surplus, theoretically possible, was not feasible politically (in that respect the Taiwan experience may be virtually unique). The government and its financial institutions (most notably the Japan Development Bank) did borrow from abroad and serve as a de facto conduit for substantial World Bank loans for specific projects in the late 1950s and early '60s, but in aggregate the amounts were relatively low compared to total business fixed investment.

Reliance on, and utilization of, postal savings to finance directed credit programs was important. It created the general perception that the postal savings were being used productively, and that lending by government financial institutions was not inflationary. Significantly, it set a de facto floor on the interest rates at which government financial institutions could lend since they were required to cover the interest cost of postal savings deposits, any loan losses, and be profitable.

Perhaps most importantly, the specific loan decisions of government financial institutions were not subject to political or government bureaucrat interference; they were rather well insulated from the sorts of direct personalistic, corrupt, or politically motivated pressures that have plagued lending practices in so many other countries. Once broad policy parameters were established (export credits and the financing of fixed investment for infrastructure and the priority industrial sectors), credit was allocated by loan officers applying objective creditworthiness criteria. They evaluated the quality and riskiness of projects, they required specific collateral, and they were tough on potential defaulting borrowers. Actual lending practices were conservative, and were extraordinarily successful: there were virtually no cases of outright borrower failure, loan losses were very low, and the government institutions did not lose money.

Japanese policymakers recognized the central role of business fixed investment, and established an institutional structure and a set of policies to provide preferential access to long-term financing at relatively low cost for large firms, especially those in targeted sectors. The general theoretical rationales were market failure and term mismatch. On the one hand, uncertainty of success of investment projects and inadequate information to evaluate project feasibility and firm creditworthiness made the long-term commitment of funds appear even more risky than in fact was the case. On the other hand, savers preferred safe, relatively short term financial assets, especially since secondary markets were undeveloped and inflationary fears persisted.

Long-term funding was supplied primarily by term loans made by government financial institutions, the three long term credit banks, city banks, trust banks, and life insurance companies (see the Packer chapter and JDB, 1993). This was typically in the form of de facto syndication of project loans involving all these types of institutions. The private long term credit banks, particularly the Industrial Bank of Japan (IBJ), played the central role, especially in project evaluation. Over time the main bank developed a greater capability and took a larger role in project evaluation of its clients. Project loan syndication typically was organized by a long-term credit bank in close consultation with, or co-organization by, the borrowing firm's main bank. A close, symbiotic relationship developed between the main bank and the long-term credit banks, though the latter were careful to work with the full range of main banks, and not to identify particularly with any single Big Six keiretsu.

A significant source of long-term funding in practice, not recorded in the data, was the rolling-over of short-term credits by the commercial banks, in particular by the main banks to their clients as an integral component of their long-term relationship. A main bank commitment to its relationship implied a promise to roll over short-term credits, and this was an important signal to the other lenders to its client.

By law and practice the Japan Development Bank played a significant but more narrow role, complementary to private financial institutions. As of 1961, 90% of its outstanding loans for plant and equipment investment were to four industries -- electric power, ocean shipping, coal mining, and iron and steel -- while those of the long-term credit and other private sector banks were distributed over a far wider range of industries. The JDB's main broader role was as an information producer for borrowing firms, thereby reducing agency costs. Through its close relationship with the Ministry of International Trade and Industry (MITI) it could make firms aware of investment opportunities and government policies towards industry, especially those without stable long-term main bank relationships (Horiuchi and Sui, forthcoming).

The JDB has been a successful exception to the sad history in most developing market economies of government-owned development banks, precisely because it was constrained to be conservative in loan decisions, require collateral and seize and sell it upon loan default, syndicate its loans, and be profit making. The JDB floor lending rate was at its cost of funds (6.5%), while the nominal long term interest rate for private financial institutions was 8.7% 9.1% (JDB, 1993, P. 131, Table III 10); since a hypothetical market clearing rate was somewhat higher, the JDB loan subsidy was on the order of 3 to 6 percentage points, substantial but far less than in many developing market economies or TSEs.

Credit rationing was more significant in long-term finance than in the short-term loan market. Small firms were strongly discriminated against; their demand far exceeded the supply made available to them. Even among large firms it mattered to some degree whether they were in priority industries or not. Access to credit, once project profitability, firm creditworthiness and specific collateral requirements were met, was probably more important in promoting targeted industries than was the favorable interest rate on loans. The main point is that there were many potentially profitable projects so lenders could behave conservatively; credit rationing directed funds to targeted rather than other uses. The relatively low long-term interest rates benefited companies both in cost terms and in providing a favorable numeraire for project evaluation.

The effective interest rate on long-term loans was positive, higher than for short-term loans, and yet lower than (implicit) market long-term rates. The average effective rate was reduced by the blending of rates on different components of the syndicated loan: lowest from government financial institutions, higher on the private long-term credit bank portion, and (probably) highest on the main bank, other city bank, and trust bank portions. The private financial institutions offset, at least partially, their low nominal long term rate by requiring compensating balances and high fees for other financial services. Long-term credit banks required borrowing firms to purchase their financial debentures (their main source of funds) as a compensatory offset.

Policy support for relatively low long-term interest rates came from two sources: the flow through of cheap postal savings deposits, and the provision of cheap credit by the Bank of Japan. The Bank of Japan provided for stable growth of the money supply primarily by lending to the city banks (and only the city banks), which chronically borrowed a substantial portion of their total funds from it. This policy was not inflationary because the government maintained a balanced budget, the increase over time in foreign exchange reserves was modest, and open market operations did not exist. Central bank loans and discounts were at low rates, and hence very profitable. Not only were they rationed (essentially by bank size so long as the banks followed the guidance of the authorities), collateral was required. The city banks could use as collateral their holdings of financial debentures, the main source of funds for the private long term credit banks. In this way relatively low cost funds flowed from the central bank through the city banks to the long-term credit banks.

The financing of fixed investment for targeted infrastructure projects relied on the same ultimate sources of inexpensive funds -- postal savings and central bank credit -- but through somewhat different mechanisms. The central government directly owned the national railroad system and the telecommunications system, and local governments owned some utilities. They were financed by postal savings through the Fiscal Investment and Loan Program (FILP) of the Ministry of Finance. Privately owned utilities, most notably the nine regional electric power companies that service most of Japan, issued substantial amounts of bonds as well as engaged in long-term borrowing from the JDB and private institutions. Their bonds were also issued at relatively low interest rates and served as collateral for Bank of Japan loans to the city banks. Bond issue by industrial corporations was severely restricted; they were purchased disproportionately by the main bank. Secondary markets were discouraged for all bonds: government, financial, utilities, or corporate. \7

4 Banking System Issues

The issues addressed above on financial system architecture and government financial policy impinge directly on the policies and behavior of banks. Three issues at this more micro level are considered here: corporate governance; credit

7 Secondary markets for long-term financial instruments were very thin. The best indicator of market long-term interest rates was the secondary market yield on Den-Densai, the small-denomination bonds issued by the government-owned Nippon Telephone and Telegraph Company that had to be purchased by new telephone subscribers and which they often immediately sold over-the-counter. Those yields were typically substantially above nominal ceiling long-term rates and several percentage points above effective short-term bank loan rates.

analysis, requisite human resources, and use of collateral; and the financing of small business.

4.1 The Governance of Banks

Who owns the banks, who controls them -- in normal circumstances, and in times of bank distress? Governance involves control over management and determination of basic business strategy, while leaving day-to-day operations to the bank management. However, depending on the ownership structure and government policy, those who own or control may be much more intrusive, going so far as to shape specific loan decisions. Governance is particularly important in situations where financial markets are far from fully competitive; information is imperfect, asymmetrically distributed, costly, and monitoring is important; and management is a relatively autonomous agent. Under these circumstances -- typical in almost all developing market economies and TSEs -- banks inevitably will have a certain degree of market power.

A central issue, especially relevant in the context of less developed economies, and TSEs, is the potential for misuse of power -- particularly intrusion of non-objective criteria into specific loan decisions -- by owners, by the government, or by autonomous bank managers themselves. State owned banks are directly subject to the policies and pressures of government bureaucrats, and at least indirectly to the political leadership, with all the potential for the infusion of political, rent-seeking, turf-maximizing or other non objective criteria (see the chapters on China, India, and Poland). At the other extreme is the situation where ownership is in the hands of an industrial family or business group. (The cahpter on Mexico describes the shift from private to state ownership and back again to business group ownership.) There the danger is that the business group will preferentially concentrate bank loans to its own enterprises, at the expense of potentially better loans, or minority shareholders, or depositor protection. Where stock ownership is widely dispersed, as in the case of large Japanese financial institutions, then ownership and control are separated with great power vested in autonomous management.

A basic objective of government prudential regulation and supervision, and disclosure requirements to enhance transparency, is to prevent the misuse of power by owners or managers. But, even when substantial ownership is private, in some countries the government exercises substantial control over bank lending and related policies and practices, not just to specific industries or for specific activities but even to specified firms. (Korea following its privatization of the commercial banks in the early 1980s is a good example.) My presumption is that, even aside from questions of personal or institutional corruption, credit allocations and loan decisions by government bureaucrats are usually less efficient and effective than those made by bankers.

The managers of Japanese city banks and other large financial institutions have had great autonomy from shareholders. Stock is held predominantly by friendly industrial corporations to which the banks lend (and in turn hold shares) but in a highly dispersed fashion in which typically no single company holds much more than 1%. Hostile take-overs bids have been unheard of. The president and the board of directors (selected by the president) in almost all instances have been promoted from within, having risen over 25 years or longer through management ranks. The Ministry of Finance and Bank of Japan set the rules, supervise, and provide administrative guidance, but they do not intervene in bank decision-making or in personnel matters. The rules of the game of good behavior were rather specific and precise, monitoring by the authorities were presumably rather intensive and informed, and the incentives for playing the game -- greater growth of bank size and profits by obtaining branch licenses and cheap central bank credit -- were substantial.

In normal times governance was subtle and indirect. The corporate ethos valued firm size; the status of a bank and its management depended more on its ranking in terms of assets than its return on assets or equity. Reputation and peer group pressure were important, reinforced by the system of delegated monitoring among the main banks. Despite substantial variance in profitability, banks moved along in a "convoy" of relatively stable growth and ranking.

What happens when a bank falls into difficulty, even distress? In the high growth era that was never really an issue, given the policy and structure; it occurred for only a few small banks, and then the Ministry of Finance intervened -- reducing dividend rates, changing management, dispatching a Ministry of Finance official to take over. In the worst case, the economically failed small bank was easily merged into a larger bank since it had the valuable asset of deposit-collecting branch offices. All this was done quietly, discreetly, with little disclosure. With separation of ownership and managerial control, stockholders have had little power. Depositors, by far the largest creditors, had the power to exit at little cost -- but they virtually never did because they believed the safety of their deposits, and indeed of the bank, was guaranteed by the government.

It may well be that serious governance problems for Japan's banks will emerge in the 1990s. The overhang of bad loans seems to have put several large banks as well as many small ones into serious difficulty. Merger will not be as easy a solution as earlier since deregulation has sharply eroded the franchise value of branch offices. Under these new circumstances it will nonetheless be the Ministry of Finance, assisted by the Bank of Japan, that will exercise control, providing credit and fiscal incentives, behind the scene. Hostile mergers through the stock market are very unlikely.

4.2 Credit Analysis and Human Resource Requirements

Providing finance requires that creditors have the capability to evaluate potential projects and corporate clients, and to carry out the provision and management of financial services. The single most important bank lending problem is how to assess the creditworthiness of borrowers. Risk assessment is not easy under the best of circumstances since information is imperfect, asymmetric, and costly to obtain, and the future is uncertain; some possible states of nature create losses beyond the control of the enterprise or bank. The essence of credit analysis is monitoring, but monitoring under the main bank system is more than that. It includes evaluation of new projects, evaluation and some influence on the performance and behavior of the enterprise's ongoing activities, and rescue or liquidation of a firm in acute distress.

Banking and finance skills are particularly important where the information infrastructure of accounting, auditing, economic intelligence, and disclosure are underdeveloped. The shortage of human resources with such skills is a serious problem, particularly in transforming socialist economies which have little history of such skill formation. One approach is initially to concentrate skilled staff at a few institutions -- banks, development banks, institutional investment funds -- and over the longer run build up the human resource base through training and on-the-job learning and spread it through a wider number of institutions.

A complementary approach is to require specific collateral against loans. Collateral reduces the need for costly credit analysis, particularly where information about the borrower or a project's prospects are limited. The key credit decision then depends on the ability to determine the market value of the asset used as collateral, in effect substituting knowledge about the collateral for knowledge about the borrower. The problem is that owners of assets are not necessarily the best entrepreneurs, developers of projects, and managers.

Japan's prewar and wartime experience in operating and managing banks produced a fairly large number of commercial bank managers with substantial human skills. The IBJ provided an important reservoir of talent skilled in project appraisal and long-term financing; some were transferred to the JDB directly, which also received skilled staff from the Bank of Japan and other long-term financial institutions. All banks have spent considerable effort recruiting outstanding university graduates and developing staff capabilities, reinforced by the systems of permanent employment, job rotation, and competition for promotion based also on seniority within a hierarchical system (see the Sunamura chapter). In particular the main banks developed strong monitoring capabilities regarding their major corporate clients, especially for ongoing activities and in situations of trouble and difficulty. However, the immobile permanent employment system, especially the policy not to hire mid-career managers from other institutions, seriously inhibited the transfer of human skills from one bank to another.

Japanese financial institutions have a long history of requiring specific collateral, especially against long-term loans and bonds. Yet this has been regarded as one component of a bank client relationship, not as a substitute for developing that relationship. Plant and equipment has typically been sequestered as collateral; since the scrap value was relatively low, project evaluation required cash flow analysis as well. In the high growth era there were enough entrepreneurs with good projects and with collateral (including third-party guarantees) that credit allocation worked effectively. The main bank system has always combined the use of collateral with intensive monitoring to ascertain a firm's future prospects, seeking to distinguish between potential borrowers with excellent growth prospects but little collateral and those simply with sufficient assets.

4.3 The Financing of Small Business Relative to Large

Japan's industrial development strategy was based on the assumption large firms were the engines of growth and should receive credit on preferential terms relative to everybody else. Accordingly, city banks were at the core of the financial system, and the regional banks and particularly the smaller local financial institutions were at the periphery. In as much as the function of the main bank system was to finance large industrial enterprises, it discriminated against smaller borrowers.

Financial institutions' behavior was fundamentally rather conservative. They could afford to be because, with such rapid growth of output and so many profitable investment opportunities, business demand for loans -- short term as well as long term -- was persistently strong and growing rapidly. Banks wanted to lend to safe companies, and they typically required collateral. Large enterprises were generally regarded as safer borrowers than small ones.

Small enterprises in fact produced most of the industrial output and employed most of the industrial labor force. Most did have access to short-term credit, but at relatively high cost. They were rationed out of substantial access to long-term funds. The government was little help: the JDB lent almost entirely to large firms; and the Small Business Finance Corporation came to play a significant role only from the 1970s (Calder, 1988). Smaller firms faced an oligopolistic loan market, reinforced by market segmentation rules and practices. They had to pay substantially higher effective interest rates, even after adjusting for transactions costs and risk; their compensating balances were much higher than those of large firms.

In fact default risk was low because lenders required full collateral from small borrowers. When borrowers defaulted their collateral was seized and sold so the actual loan losses by financial institutions lending to small business were small during the high growth era, less than 1%. During this period, reflecting their respective degree of market power, in terms of return on equity, credit associations were the most profitable, then mutual savings banks (sogo ginko, which in 1987 were transformed into second-tier regional banks), regional banks, and least profitable of all, city banks. Market segmentation apparently resulted in less than optimal allocation of loans by firm size despite an active interbank call market.

The main bank system as defined throughout this book was essentially only for large industrial firms, even though small enterprises typically claim some form of main bank relationship with their primary lending institution (see the chapter by Horiuchi). Most fundamentally, there was no bank commitment to rescue or restructure a small firm in distress. The nature of the banking relationship was narrow; small firms did not issue bonds, have foreign exchange transactions, or generate other fee business, and banks did not own any of their equity. Much of the problem in lending to small business was the lack of information, the cost of obtaining it, and hence the difficulty in evaluating the creditworthiness of small business borrowers and their collateral. Monitoring of company performance accordingly was far less thorough; the costs outweighed any benefits.

There were other important sources of small business credit, notably the huge amounts of trade credit. Large manufacturing firms and large trading companies became de facto financial intermediaries, borrowing from their main bank syndicate and providing credit to related subsidiaries, subcontractors, and wholesalers since in the normal course of business they developed superior access to information about their creditworthiness.

Venture capital institutions to provide risk capital for new, small entrepreneurial start-ups did not exist in the high growth era, and have been slow to develop subsequently. New small firms had to finance themselves just like new firms everywhere: the owner's savings, borrowing against the owner's real assets, and credit guarantees by relatives and friends. Yet the entrepreneurial drive to set up one's own firm, to be one's own boss, is strong in Japan; every year more new small firms were established than in the United States, and every year more failed or otherwise exited. And some grew to become large and well known — such as Sony, Honda, and Kyocera.

5 Lessons from Japanese Financial Development

The main bank system was at the apex of the Japanese financial system in the high growth era and arguably still is. In important respects it has epitomized Japan's financial structure and policies. In the economic and financial environment of the high growth era the main bank system matured and flourished. It represented a successful solution to a key developmental problem: how to finance large industrial enterprises efficiently and effectively. Directly and indirectly, notably in cooperation with the long-term credit banks, the main banks were typically the single most important source of external finance, long term as well as short term, for most of Japan's large industrial enterprises. The specific merits of the main bank system as a model for other countries is discussed in more detail later in this section.

Even broader lessons can also be derived from the Japanese case of financial development, particularly in the postwar high growth era. Moreover, the main bank system cannot be evaluated in isolation; after all, it is a subset of the banking system, which has constituted the core of the Japanese financial system. The acknowledged effectiveness of the Japanese financial system depended upon its institutional structure (financial architecture), government financial policy, and the macroeconomic policy environment, as already discussed. This does not mean that another country should aim to replicate the Japanese financial system in toto. It is necessary to identify the key issues and the relevance of the Japanese experience -- or model if you will -- for dealing with them.

The lessons for financial institution development and for appropriate policies are essentially structural and longer run. Policymakers must have some long-term (10 to 20 year) vision of what the financial system should be, and an understanding of the process by which these long-term objectives can be achieved. As stressed at the beginning of this chapter, the most effective institutional arrangements and policies depend critically on each country's own goals, its own history, and its current situation. It is important to remember that even in the economically most advanced countries, as recent finance theory has stressed, markets are incomplete, information is imperfect and costly to obtain, and it is not possible to write complete contracts covering all contingencies; the conditions in developing market economies and TSEs are much further removed from the neo-classical, perfectly competitive model.

A skeptical view of the stylized facts of the prototypical developing market economy is that it has a host of problems: macroeconomic instability; a limited institutional and physical infrastructure; low levels of economic, business, and financial information; quite imperfect markets with considerable market power and profound information asymmetries; weak banks and capital markets; and lack of human capital skills in finance and other areas. Prototypically, its government pursues low interest rate policies, restrictions on competition among financial institutions, and credit rationing; financial repression is moderate to severe. Accountability -- sanctions and rewards -- for decisions is not high;

corruption, both personal and institutional, is a problem of some seriousness; and soft-budgeting practices, especially for large, state-controlled or "strategic" enterprises, tend to misallocate resources and undermine macroeconomic stability. These difficulties are more extreme in the prototypical transforming socialist economy; moreover, it has a much more limited historical heritage of a market economy and its institutions, and a profound lack of requisite human skills. It is from this perspective that transferability of the Japanese experience should be considered.

5.1 General Lessons

5.1.1 Macroeconomic Stability

The most important general lesson, and not just from the Japanese experience, is that macroeconomic stability is essential to achieve rapid, sustained economic and financial development and, over time, a more open and competitive economic system with strong financial institutions. Control over inflation is essential for the development and effective functioning of the financial system. Most savers mainly demand safe, liquid financial assets (deposits) whose real value is not eroded by inflation; only as their wealth accumulates are they willing to diversify into longer term and riskier assets.

Following the Occupation stabilization policy of 1949, Japan pursued a fiscal-monetary policy mix of fiscal tightness and rapid money supply growth commensurate with price stability. The government budget was balanced, government debt issue was negligible, and the ratio of government debt to GNP was very low. This macroeconomic policy mix supported the modest role of the government in domestic demand and the central role of private sector finance, particularly bank loans, in funding business growth.

Sufficient political stability to reduce to reasonable levels uncertainties about the major contours of major economic and social policies and the likelihood of disruption of ordinary economic activities is important in any country. The Japanese experience was extraordinary in the degree of political stability achieved in 1955 by the alliance of moderate parties to form the Liberal Democratic Party, which was in power continuously until 1993. Perhaps equally important in the high growth era was the widespread consensus that government policy should focus on economic growth, a consequence in part of the dramatic loss of World War II.

Economic policy on the whole promoted the development of a competitive environment, particularly in product markets. Initially producers were protected from imports; easy entry nonetheless resulted in quite competitive domestic markets, reinforced by the very size and rapid growth of the economy. There were less competitive sectors, and some became increasingly so as the economy grew: agriculture and wholesale and retail trade most notably. Labor markets were in principle free, but the ever-growing demand of large firms for labor trained to their specific needs made the development of a permanent employment system efficient. The land market and stock market were on the whole competitive. Finance is most effective when ensconced in a competitive economy; it can respond to the right price signals. At the same time finance itself was the slowest sector to develop competitive markets. However, as is argued below, at least initially the regulatory restrictions on competition were strongly supportive of, and many would argue essential for, the development of a strong banking system.

One consequence was the development of a producer-oriented society, but consumers and savers also benefited enormously, if indirectly. Japan's fast growth from the early 1950s to the mid-1970s generated rapid increases in wages, household incomes, and consumption. Japan's standard of living, despite many problems, rose far more rapidly than it ever had before and more rapidly than any other country in the world during that time period. Until well into the period, there was an implicit social contract whereby households accepted low yields on savings deposits and poor housing quality in exchange for a system that generated rapid growth in GNP and household incomes.

5.1.2 The Structure of the Financial System

The Japanese experience, and indeed that of all market economies, is that banks play a predominant role in business finance. Securities markets become a significant source of large enterprise finance only in the 1980s. The policy issue was whether large enterprise finance, particularly for plant and equipment investment, can be done effectively through a banking-based system. The Japanese main bank system, involving close coordination between city banks and long-term credit banks, has demonstrated that it can. Moreover, it suggests Japanese policymakers were correct in having rejected U.S. Occupation proposals to develop a corporate bond market as a major source of corporate finance.

There are several strands in the analysis. First, the demand for industrial long-term finance was particularly strong. As consequences of both World War II destruction and their technology absorptive capabilities, firms in large-scale, capital-intensive ("heavy and chemical") industries were in a good position to develop profitable projects. Second, there was a term mismatch. Savers were not prepared to purchase corporate bonds since their assets were limited, they well remembered the all-too-recent disastrous effects of inflation on bond portfolios, and they were risk averse, wanting to hold safe, short-term, liquid financial assets. Third, information about corporations was limited and it was difficult to assess risk. Institutions -- accounting, auditing, securities analysis, credit rating agencies -- to support monitoring through a corporate bond market were underdeveloped or non-existent. Fourth, the human resource skills to evaluate the creditworthiness of large corporations and their projects -- to do monitoring -- were in very scarce supply. It made sense to concentrate them at a relatively small number of institutions, namely the long-term credit banks and the city banks. Fifth, the Occupation induced the legal separation of commercial and investment banking. Because prewar banks had underwritten corporate bond issues, they still had the human capital skills, while the securities companies (investment banks) did not, and personnel did not shift. Even if the bond issue market had not been repressed, it is likely that the financial debenture of long-term credit banks would have been preferred to corporate bonds, so that the flow of funds, at least in the early years, would not have been so different.

Formally Japan established a system of commercial banking, unlike Germany's universal banking. Yet Japanese banking incorporated several of the attributes of universal banking: establishment of a close long-term relationship with large industrial clients; arranging of long-term as well as short-term finance; close monitoring of firms, from new project evaluation to ongoing performance to rescue restructuring in times of distress; and direct investment in the company's equity.

There is no definitive answer whether the Japanese main bank model or the German universal bank model is more appropriate for developing market economies and TSEs. My view is that the Japanese model has the edge. Underwriting securities issue is not a major practical issue where securities markets have not yet developed into a significant source of finance. It has been argued that the German system involves cozier, more self-serving, oligopolistic relationships among a small number of banks and large firms. One aspect to which many attach considerable significance is the degree of bank ownership of a company's equity. Ownership certainly has symbolic value in Japan, with the main bank typically the largest bank shareholder of a firm, but power to directly exercise control is much less clear since ownership was limited to 10% (reduced to 5% effective in 1987). The relevant lesson is that allowing banks to own non-controlling shares in companies is desirable where it is an important element in developing and maintaining the close bank-corporation relationship.

The Japanese banking system embodied a system of specialized financial institutions and segmented financial markets. The former is probably appropriate for other economies; the latter is perhaps not. The system discriminated in favor of large industrial enterprises; city banks were presumed to provide them short term and, increasingly, long-term loans, while long term credit banks, trust banks, and insurance companies provided longer-term loans. Regional banks, mutual banks and credit associations financed medium and small enterprises, agricultural cooperatives financed farmers -- at substantially higher effective interest rates even adjusted for risk (which were low because collateral requirements were high). The regulators and the ethos of bankers perpetuated this dynamic disequilibrium in segmented financial markets throughout the high growth era.

Market equilibrium analysis implies that small business enterprise investment was too low relative to large firms. The counter argument is that large firms were key agents of growth as the importers and improvers of technology, and they diffused technology to smaller firms. My presumption is that most policymakers in developing market economies and TSI's perceive large firms to be the engine of growth and their financing to be essential. Even if this is true, they should be aware of the need not to distort financial flows too much away from smaller enterprises. Special attention needs to be given to creating and providing incentives for financial institutions that finance small business activities.

The three Japanese private long-term credit banks, especially the Industrial Bank of Japan, played a crucial role in financing large firm plant and equipment investment, not only in providing funds but especially in project evaluation as to creditworthiness. They worked closely with the city banks in syndicating term loans for main bank clients. This was an effective division of labor for some time -- until their respective capabilities and business strategies increasingly converged, especially in the deregulation and easy money environment from the 1970s when private saving outstripped private investment. The Japanese experience suggests that a system of commercial banks and of long-term credit banks working together is very effective.

How about the respective roles of privately owned banks and other financial institutions and of government financial institutions? In many countries the government owns the major banks and long-term development finance institutions. As a long-run objective, that is a mistake in virtually all countries; it is difficult to insulate government owned (or controlled) institutions from the political process, and their decision making processes are bureaucratic rather than market-oriented.

The Japanese financial structure demonstrates that an effective role can be found for government financial institutions, where their lending activities are focussed, limited, and complementary to private financial institutions. Two factors were key to their success: they had to be profit making institutions, and they had autonomy from government bureaucrats and politicians in loan decisions, which they based on objective creditworthiness criteria of projected cash flow and specific collateral. In this respect the Japanese lesson is cautionary. That the Japanese Development Bank is one of the very few cases of successful government development financial institutions was not an accident.

An important reason for the success of Japanese government financial institutions is that they had access to cheap funds through the government's postal savings system, where deposit interest rates, as in private financial institutions, were subject to low ceilings. Postal savings, utilizing ubiquitous post office branches, is a cheap, convenient and effective way for a government to mobilize private saving. There are, however, dangers. One is that postal savings become an easy way for the government to finance fiscal current expenditure rather channelling the funds to productive private business investment. Japan avoided this pitfall. Another danger is that postal savings deposits directly compete, often on more favorable terms, with bank saving deposits, thereby channeling savings away from private financial sector intermediation. This has happened in Japan, in large part because the Postal and Telecommunications Ministry rather than the Ministry of Finance has had authority over postal savings.

5.2 Financial Public Policy Issues

5.2.1 Deposit Safety, Bank Safety, and Prudential Regulation

Public confidence and trust in the banking system, and the financial system more broadly, are essential for successful financial development. Particularly for household savers -- who often are ill-informed about the actual conditions and trade-offs among risk, yield, and liquidity of various financial assets -- deposit safety is a high priority. This can be achieved through deposit insurance or by government guarantees that banks will not be allowed to go bankrupt.

The Japanese government pursued a very conservative policy of guaranteeing banks against formal failure. While the guarantee was implicit, depositors and indeed all financial market participants fully believed that the regulatory authorities would not allow a bank to fail, much less let depositors take any default losses. When a problem bank emerged, the regulatory authorities would intervene and, where necessary, merge it into a stronger institution. Any bank was "too big to fail." In the turmoil of the early postwar period, this guarantee was essential, and highly effective; an additional guarantee of deposit insurance was of marginal significance.

One dilemma of such strong bank safety guarantees is that they increase the moral hazard of banks taking excessive risks. To prevent this, and to reduce the government's financial exposure, the regulatory authorities have a range of policy options. They can require high minimum capital-asset ratios, exercise strong prudential regulation and effective supervision, or ensure bank profitability through constraints on competition. There is a danger that measures taken to restrict competition will result in rent-seeking behavior and credit misallocation.

Japan legislated but did not enforce high capital adequacy rules, and actual ratios were low. A basic problem was that equity capital was short and the only effective way to increase bank capital was through retained earnings, achieved by making banks profitable and restricting dividend pay-out. Japanese policymakers did constrain the terms of bank competition by restricting entry, segmenting markets, and setting a ceiling rate on deposits sufficiently low to make deposit-based lending very profitable (but sufficiently high, combined with favorable tax treatment, to prevent potential depositors from fleeing to real assets).

Prudential regulation and effective supervision are essential in any banking system to prevent fraud, excessive risk-taking or other forms of bank mismanagement, and to enforce rules designed to enhance bank safety. Japanese regulatory controls and supervision were very effective in the high growth era in ensuring bank safety and good performance. They were enforced both by valuable incentives (cheap central bank loans, new branch office licenses) and potentially severe sanctions (dividend pay-out reduction, replacement of management, merger).

in an environment in which bankers were willing to play the regulatory game with the Ministry of Finance. The regulatory authorities knew quite well the actual conditions of every city, regional, trust and long-term credit bank (there were fewer than 90 in the high growth era), worked quietly to solve any problems through guidance, and seldom disclosed problems so as not to undermine public confidence.

The Japanese public trusted the power, authority, and honesty of the Ministry of Finance and the regulatory framework and its administration. One cost was that it made possible a very non-transparent system of regulation by administrative guidance and informal negotiations between the banks and the Ministry of Finance, in what became cozy, non-arms length relationships. In countries where the public may be more skeptical of government bureaucrats, and as a long-run objective even for Japan, a transparent regulatory system certainly is highly desirable, perhaps necessary.

5.2.2 Low Interest Rate Policies and Financial Repression

Japanese experience provides two important lessons concerning financial repression. First, in comparison to many developing market economies and TSEs, the degree of Japanese financial repression was limited and modest. Ceiling interest rates were positive in real terms. Importantly, banks were able to adjust loan rates closer to market rates by requiring compensating balances, thereby reducing the likelihood of credit misallocation and rent-seeking behavior. Despite restrictions on entry there were a significant number of banks, especially in the large enterprise loan market, so that a reasonably competitive environment apparently emerged. Banks were insulated from political and bureaucratic pressures in making specific loan decisions. In sum, Japanese policy and behavior apparently kept the adverse effects of even the modest degree of financial repression to a minimum.

Second, low interest rates, the wide interest rate spread, and the restrictions on competition effectively subsidized the strengthening of what, in the early 1950s, was a fragile Japanese bank system. In this respect the rents from limited financial repression were used beneficially for institutional development. Many, though by no means all, experts on Japanese banking and financial markets deem this support to have been essential for the building of a strong banking system and, by extension, a strong main bank system. It also has been argued that the (modest) credit rents some categories of borrowers obtained were constuctively indexed to objective, performance enhancing indicators.

If the present situation in a developing market economy is that the degree of financial repression is moderate to severe -- real interest rates are very low or negative, competition is limited, and credit rationing is substantial -- then the lesson from the Japanese experience is that less financial repression is better. The trade-off between the benefits of institutional development and the costs of credit misallocation and rent-seeking behavior have to be weighed carefully, and the tendency to excessive financial repression resisted. Moreover, over time as the banks become stronger, the need to subsidize institutional support decreases and accordingly the degree of financial repression should be reduced. To some extent this occurs through market forces as financial market participants find loopholes. In addition the government will find it desirable to pursue policies of financial deregulation and liberalization. One danger, as was the case in Japan, is that deregulation will be delayed because of bureaucratic inertia and desire to retain power, and the creation of vested interests in the regulated system.

5.2.3 Directed Credit

I take as a given that the government's development strategy will place priority on certain activities, which will be subsidized in various ways including preferential allocation of credit at lower interest rates. The issues involve the type of activity, the degree of subsidy, the nature of the credit allocation mechanism and process, and the potential inflationary consequences of the funding process.

The Japanese government directed credit to promote exports, build physical infrastructure essential for industrial growth, and develop certain strategic or targeted industries. In comparison with similar programs in most developing market economies and TSEs, these Japanese subsidies were relatively low. Moreover, the credit allocation process was objective and successful performance was a requisite for continued support. Export trade credit and loans for export production were not differentially subsidized by sector, with the exception of Export-Import Bank term loans for sales of ships and machinery. Infrastructure investment was financed directly through the government budgets, through government financial institutions, and to some extent by private financial institutions (notably for the private electric power companies). Interest rates were below long-term credit bank rates but were positive, because government financial institutions were not allowed to lose money and because they relied on postal savings, which set a floor on their lending rates.

The role of industrial policy in the development process is more controversial. So too is detailed evaluation of Japan's experience. The most significant facts of the Japanese experience are that while some of the winner industries of the high growth era obtained directed credit, others did not, and there were some cases of failure in target selection. Lending by government financial institutions was the major form of subsidized, directed credit and was initially important but became much less so from the 1960s; government influence over private bank lending was indirect, relying on the financial structure and its incentives rather than on directly controlling credit allocation; and while industries were targeted, specific firms within them were subject to standard credit evaluation and project analysis. A major proportion of directed credit for plant and equipment investment in the 1950s went to four industries -- iron and steel, electric power, marine shipping and coal mining. Two of these -- shipping and coal -- became inefficient, declining industries from the 1960s, and absorbed a large proportion of Japan Development Bank loans because private banks judged them unattractive. In the 1960s the proportion of targeted in total plant and equipment investment finance decreased substantially, and was not significant thereafter.

The basic features of Japan's directed credit policy determined its success, and are directly relevant for other countries. They included: a relatively broad targeting concept (industries not firms); credit allocation done by bankers using objective creditworthiness criteria; little interference by government officials or politicians; positive real interest rates, with relatively modest degrees of subsidy; implementation primarily through government financial institutions; reliance on private savings mobilized through the postal savings system; and utilization of the private institutional structure of long-term credit banks, city banks (especially to their main bank clients), and trust banks for the provision of long-term finance. A further, important lesson is that government financial institutions and their management must be held accountable. In Japan they were not allowed to be unprofitable, and had to be severe in requiring collateral and taking it in instances of loan default. They worked with and were supplementary to private financial institutions, rather than being little more than the agents of government bureaucrats who determined specific allocations of "policy loans."

5.2.4 Avoidance of Rent Seeking and Corruption

Policymakers must confront the reality that in some economies corruption is a serious problem. In the financial sphere, opportunities for rent-seeking and corruption are endemic when loan interest rates are set far below market-clearing rates, credit is rationed, and the regulatory environment is weak. There are two levels of problem: individual and institutional.

The finance literature quite appropriately emphasizes the importance of prudential supervision and of transparency to prevent individual banks, firms, or persons from engaging in excessive risk taking, favoritism, insider exploitation of asymmetric information, fraud, payment of bribes to obtain rationed credit on favorable terms, and the like. Institutionalized corruption is more systemic in nature; it involves the financing of politics and the political leadership through illegal contributions and payments in exchange for political and government official decisions to have credit allocated on preferential terms to favored firms. In effect credit rents are created by government policy, and used in part to support the government leadership. This is the central political economy issue of finance; it has not been subject to extensive empirical research for obvious reasons.

The most effective way to deal with corruption is to eliminate credit (and other regulatory) rents by promoting a high degree of market competition supported by an appropriate legal and institutional framework. This sharply reduces the opportunity for rent-seeking behavior. However achievement of a highly competitive market economy is an ideal, and certainly will not be achieved overnight. In finance, the degree of corruption is directly related to the degree of financial repression, which creates the regulatory credit rents.

Financial repression in Japan was modest and limited. Credit rents were relatively low, and specific credit allocation decisions were insulated from significant political pressure or bureaucratic interference, and were made by bankers by objective criteria of collateral and cash flow. With the exception of government financial institutions, effective interest rates on loans were only modestly below market-clearing rates. Legal, economic, and social sanctions against various forms of morally hazardous behavior were severe, prudential regulation was strong, and bank supervision was effective. These are the lessons for other nations.

Thus, despite a few notable scandals, the Japanese financial system by and large has not been subject to individual corruption. The degree of institutional corruption -- hidden illegal donations to politicians and political parties by financial institutions -- has not been perceived by most Japanese to have been an intolerable problem. However, this is a murky area. The nature of the relationships between Japanese banks, large and small, and politicians, national and local, is apparently close and particularly opaque, yet to be subject to substantive investigative reporting. It is worth noting that none of the scandals of recent years regarding the transfer of regulatory rents by businesses to politicians and bureaucrats (government procurement, trucking route licenses, terms of IPO issue) have involved banks.

5.3 The Main Bank System as a Model for Financing Large Industrial Enterprises

In any market-based financial system banks play a major role, certainly in the financing of small and medium firms and, except for the United States, in the financing of large industrial enterprises as well. The Japanese main bank system epitomizes in many respects the success of the Japanese banking system in mobilizing savings, and allocating them effectively through loans to business, particularly large enterprises. It is an especially appropriate model for bank financing of large enterprises in many developing market and transforming socialist economies.

The essential features of the main bank model are micro. It is a low cost, efficient and effective institutional solution to the problems of costly, imperfect, and asymmetric information about borrower creditworthiness, given the reality that markets are not perfectly competitive and complete, and cannot be (Stiglitz, 1991). In a market-based credit rationing model lenders classify, albeit imperfectly, borrowers into categories by degree of risk (creditworthiness) in order to overcome adverse selection and incentive problems (Stiglitz and Weiss, 1981). The least risky categories are preferred customers. The most risky are simply not lent to. The degree of rationing in intermediate categories depends on the supply of loanable funds, the quality of information for credit analysis, and to some degree on the effective interest rate it is possible to charge.

In a regulatory model of credit rationing, government influence on the effective interest rate has some significance on the terms of bank loans; and its policies or signals indicating which activities or industries are of high or low priority influence bank thinking as to which categories firms should be assigned. A regulatory credit rationing framework enhances the power of the bank vis a vis the borrower, by widening the gap between demand and supply, and makes the establishment of a main bank relationship even more valuable to both bank and firm.

As is stressed throughout this book, the essence of the main bank system is the ability of the bank to monitor effectively and to arrange for funding for those large industrial clients with which it has a particularly close and sustained main bank relationship. The city banks worked closely with the long-term credit banks in new project evaluation and provision of long-term funding through the main bank relationship. The main bank took responsibility both for gathering and producing information on the ongoing activities of its client and for providing the client information and advice (in effect, management consulting services) to enhance enterprise performance. It also took responsibility for, and a disproportionate share of the cost of, rescuing, restructuring, or liquidating a firm in distress. These monitoring functions are essential in any financial system. They constitute the core of what can, and in many cases should, be transferred to other countries as they develop their own banking systems.

The most distinctive feature of the Japanese main bank system is it central role in the restructuring of large firms in distress, at considerable cost to the bank. This has proven to be a cheap and effective restructuring mechanism. Rescue is by no means automatic: the main bank makes a rational calculation as to whether the firm is worth more by liquidating its assets or by restructuring its activities and financial position and continuing it in operation. Liquidation is a complex and gradual process, ultimately involving merger into a stronger firm without going through formal bankruptcy. The bank requires a detailed financial and business plan, into which its own staff provide significant input; it has the power to replace management; and it is able to determine (through negotiation with other creditors) the firm's new financial structure. Inevitably there is considerable uncertainty in estimating a firm's potential future prospects; the presumption is that a close main bank relationship ensures the firm will be treated more generously than severely within that range. The great danger is that of soft budgeting, of providing new funds for the continued operation of firms that are not economically viable and should be liquidated. Japanese banks in the high growth era avoided the problems of soft budgeting, with only a few mistakes. The lessons are that a commitment to rescue and restructuring should be conditional upon economic feasibility, the restructuring should be carefully planned and implemented, and the main bank should be tough in exercising its leadership both vis a vis the firm and other creditors.

There were three direct incentives for Japanese banks to seek out main bank relationships. The most important was the rent (or return) derived from investing in information about the borrower, and hence the reduction in risk premium for good borrowers. The need to recoup monitoring costs even in a relatively competitive short-term loan market was eased by the system of delegated monitoring among banks. Second, the main bank received preference in providing various lucrative financial services to the borrower, including transactions deposits, foreign exchange business, trustee and other fee business, and the business of subsidiaries and affiliate companies. These financial services markets were not completely competitive; relatively high prices were set by regulation or oligopolistic behavior. Third, main bank ownership of corporate enterprise equity, even in the relatively limited amounts allowed, provided incentives to and benefits from monitoring (Kim, 1991), and signalled the closeness of the relationship. Further, it can be argued that the regulatory framework and the modest degree of financial repression effectively subsidized the institutional strengthening of banks in general, and made them more willing and able to develop main bank relationships. Certainly the main bank system, which evolved in response to the economic and regulatory environment rather than as a consequence of direct government policies, well met the interests of the government in promoting large enterprises as the engine of growth.

5.3.1 Issues in Transferring the Main Bank System

The relevance, usefulness and transferability of the Japanese main bank model has to be placed in the context of a broader range of issues of finance and banking development, and how they are resolved. Moreover, an effective main bank system cannot be created overnight. As with other types of institutional development, it takes time for learning, development of skills, creation of knowledge, and growth.

One issue is the governance of the large banks that will be engaged in main bank relationships. Who owns the banks? Who controls bank policy, both of basic business strategy and of specific loan decisions? Concentrated ownership makes for shareholder control. The new privatization of Mexican banks places ownership and control in the hands of business groups. Will prudential regulation be effective in preventing the owners from manipulating bank lending for their own benefit? In India commercial banks and development banks are owned by the government; they are bureaucratic and far from efficient. In China and Poland the banking systems are government-owned and nascent. In Korea bank equity ownership is dispersed, while control to a considerable degree has been vested in the government, which has had a dominant influence on bank policies, even at the level of certain specific enterprise and business group loan decisions. In Japan bank ownership is widely dispersed (except for a few small banks) and in normal circumstances management has great autonomy within the general parameters and guidelines set by the Ministry of Finance.

Management autonomy, a feature also of most large Japanese industrial enterprises, has worked well in Japanese banking. Their incentives and sanctions, and insulation from politically motivated government pressures or self-serving pressures of concentrated stockholders, have enabled them to allocate credit effectively. Yet it is by no means clear that management autonomy in bank governance will operate nearly as effectively in different institutional and policy environments. There are dangers in a self-serving management, expropriating rents for their own benefit. Perhaps the most significant lesson is that bank governance is an important matter since what is at stake is the efficient operation and effective credit allocation of banks.

Related both to corporate governance and the structure of the financial system is the issue of where scarce human capital in banking skills should be concentrated initially, and how they should be expanded and diffused over time. In early postwar Japan, project evaluation skills were initially concentrated by virtue of history in the long-term credit banks, especially the Industrial Bank of Japan. Over time city banks, particularly those with strong and extensive main bank relationships, developed project evaluation skills. City bank staff had some skill in monitoring the ongoing operations of their clients; over time, particularly through the requirements of the main bank relationship, they built up those skills. Those with a substantial number and range of main bank relationships also developed skills in restructuring clients in distress, accumulating learning by doing and documenting. The lessons suggested by Japanese experience is that scarce human skills might initially be concentrated in a relatively small number of institutions, that skilled personnel should be trained up, and that over time they should be diffused among a sufficiently large number of non-governmental institutions so that information quasi-rents and oligopoly market power are reduced.

The main bank system is effective in overcoming problems of project evaluation and lack of information about a client's creditworthiness. Nonetheless, where the basic information is weak or where banking skills are lacking, asset-based lending is a conservative complement to -- rather than substitute for -- cash flow and other techniques of performance analyses. During the asset price boom of the late 1980s asset-based lending dominated cash flow analysis for many real estate projects; the expectation was that prices would only go up, which has proven to be an incorrect and costly assumption.

The Japanese banking system since its modern beginning in the 19th century has had a history of requiring specific collateral for loans, particularly longer-term loans, and of selling that collateral when loans were defaulted. Despite potential inefficiencies in that entrepreneurs with excellent projects but inadequate collateral are rationed out of the credit market, requiring collateral enhances bank safety and reduces borrower (and lender) moral hazard; in many developing market economies and TSEs, these benefits probably outweigh the costs. An even more conservative approach given high risks, especially in TSEs, is initially to limit corporate finance to equity ownership, then non-bank lending, and eventually limited fully collateralized, self-liquidating short-term loans (McKinnon, 1991).

The main bank system is a particularly intensive and close form of relationship banking. The relationship in Japan is multidimensional and comprehensive, including equity ownership, is based on substantial trust by both sides, and involves careful bank monitoring. The main bank leadership role in rescue and restructuring of a firm in distress is an important distinctive feature. As so defined, the main bank system applies in Japan only to the financing of large industrial corporations listed on the stock exchanges. Smaller companies have a less intensive form of relationship banking which they also refer to as having a main bank, but the bank ex ante commitment to rescue and restructuring is limited if it exists at all. But this does not mean that the financing of small business is unimportant. Quite the contrary. In the high growth era and even at present smaller, non-listed firms produce most manufacturing output and other industrial value added and are the predominant source of employment. One way or another, their growth has been financed. The lesson: policymakers must recognize the role of smaller enterprises, and ensure that the financial structure provides funds to carry it out.

The main bank system can and does work well in a deregulated, competitive financial environment, as shown by the Japanese experience since the mid-1970s. It was the major main banks that pressured the Ministry of Finance to deregulate. Under changed domestic and international market conditions they saw new opportunities and believed (correctly) in their superior abilities to compete. They had to adjust to the shifting of some major clients to securities market issue from bank loans, and the main bank relationship with some of them loosened and changed form.

Does the main bank system represent an intermediate stage of large enterprise finance, in place only until economies grow and mature and securities markets become the more efficient mechanism? Looking to Japan's future, in my judgment the development of a more competitive environment and the rise of an effective securities issue market will not result in the demise of the main bank system, but will transform it somewhat. A subset of very large, successful, Japanese companies no longer need a deep, substantive relationship with a main bank; they are able and willing to finance internally or to utilize less expensive securities finance. They will become increasingly independent. Yet many large industrial companies will want to continue their well-established main bank relationship for its mutual shareholding and financial service features. Smaller listed enterprises, without high credit agency ratings, have relied upon main bank guarantees for their bond issues; the main bank continues to monitor, but for fees rather than income from loans. As the 1990s progress, some banks may well end their main bank relationship with certain smaller, weaker, less attractive listed enterprises, selling off their equity holdings in the process. However, these are the companies for which main bank monitoring services create the most value, so the main bank relationship is likely to be shifted from one bank to another. Only those companies where the risks (and costs) of potential distress are high will be excluded from (rationed out of) the main bank system altogether. They will then be potential candidates in an emergent take-over market. On the other hand, banks are likely to seek out new main bank relationships, including equity holdings, with unlisted, smaller companies with good growth prospects that are candidates for public listing (Packer, 1993). Thus, the main bank monitoring function will continue to be important for all but a relatively small proportion of large companies.

5.3.2 Special Problems of the Transforming Socialist Economies

The transforming socialist economies can learn much from the Japanese historical, institutional, and policy experience of financial development and growth. As they succeed in making the transition to market economies, Japan's high growth era will be particularly relevant. In their process of transition the TSEs face many problems similar to those Japan had in the early postwar period of dislocation and transition to democracy and a market economy. Japan had to deal with severe problems of shifting from armaments to civilian goods production, rampant inflation, very limited trade and stringent exchange controls; a virtually insolvent banking system, and many insolvent large enterprises due to a horrendous bad (government-repudiated) debt overhang. How Japan solved these problems offers insights into good macroeconomic policies and to the resolution of soft budgeting and debt overhang difficulties (see Teranishi, 1993). There are major differences to keep in mind, however. Japan had a long experience as a private market economy and a quite well developed institutional infrastructure, only briefly interrupted by wartime controls and economic planning. It had a reasonable supply of human capital skilled in commercial and development banking. The early postwar Allied Occupation was an external force which could impose pro-market, pro-democracy changes in institutions, policies, and practices -- though to be successful they ultimately had to be acceptable to Japanese policymakers and the general public, as in fact almost all were.

The important questions are: what can the TSEs learn from the architecture and policies of the Japanese financial system and, congruent with the purposes of this study, from the main bank system? The answers depend on the particular problems policymakers face in each TSE, as are well reflected in the chapters on China and Poland. There is a burgeoning literature on the appropriate financial architecture and policies for TSEs, much of it generated by the World Bank (see for example Caprio and Levine, 1992, as well as McKinnon, 1991). It is beyond my purpose here to review and assess that literature, or to judge what might be the best model of financial structure and policy for TSEs.

We can say that the Japanese experience represents a very good model for the TSEs in several essential respects. It is a banking-based system -- and at this stage of TSE development, banking is a more efficient mechanism for industrial finance for large enterprises than the securities market (Corbett and Mayer, 1992). Active stock markets apparently will develop relatively early in many TSEs as a result of the privatization process of large state enterprises. These are likely to be trading markets, useful for stockholder liquidity and for the function of price discovery. However, they will not be markets for substantial new fund-raising through enterprise stock or bond issue; the uncertainties are too great, the information too poor, the risks too high.

Bank monitoring, as based on the Japanese main bank model, will more efficiently and effectively overcome information problems for lenders, and in the process instruct enterprises in the basics of cash flow analysis, cost accounting, and other internal information-generating systems essential for creating viable firms. The creation of securities markets will facilitate the effectiveness of a main bank system by more readily providing the opportunity for bank ownership of enterprise equity, thereby strengthening the incentives for deep monitoring and for commitment to take the leadership in rescue (or liquidation) of firms in distress.

TSEs have two particularly important problems: the overhang of state enterprise accumulated bad debt, a problem compounded when the debt is held by financial institutions rather than the government; and continued financing of economically non-viable large enterprises (soft budgeting) for political, social or other reasons. The banking system, or a main bank system, cannot solve these problems; they are essentially political in nature. Most of the costs of accumulated past bad debts will have to be absorbed by the government (society). If non-viable enterprises are to continue to receive financial or other subsidies, it should be done directly through the government budget rather than indirectly (and often in hidden ways) through financial institutions. If banks (or any financial institutions) are to be effective monitors and allocators of credit, they have to be prepared and able to deny funding to poorly performing enterprises, whether state or privately owned. This may well be the greatest impediment to developing an effective banking system in TSEs. A further dilemma is the lack of human skills; many financial officers in TSEs have experienced only soft budgeting, not hard.

How much control over large industrial enterprises should banks have? There is no easy answer; the financial architects for each TSE will have to answer that based upon the particular country's circumstances. In the early stages there is probably some danger of too little control, of relatively limited relationships and monitoring. At the other extreme there is very much the danger of too great control, either by the banks themselves or, more likely, as instruments of the government (for example, Korea and India). In between the extremes are the Japanese main bank and German universal bank models.

The choice between Japanese and German models of very close relationship banking will depend on a country's specifics of history, institutions, and values. What can be said is that the German and Japanese types of bank-based finance are similar, and each has performed well in its own context.

The main bank system is not a panacea. Form without substance is usually a recipe for disaster. To be successful it must be buttressed by appropriate policies and behavior -- good prudential regulation and effective supervision, competitive financial as well as goods markets, and strong sanctions against poor performance. A very real problem is to devise a structure and policies that minimize opportunities for rent-seeking and corruption. Even aside from information asymmetries, the transition process in TSEs has been creating huge rents in the arbitrage between regulated and market prices, allocations by licensing and rationing (especially credit rationing), the privatization process of state enterprises and assets, and the like.

Given the reality of information imperfections, costs, and asymmetries, institutional mechanisms for monitoring within and in support of a generally competitive environment are essential. The Japanese structure of a dozen or so nationwide city banks and three long-term credit banks as the major financiers of large enterprises led to workable competition despite some constraints and distorted incentives. Fewer institutions would have resulted in greater oligopolistic behavior. A further lesson is the importance of the constraint that all financial institutions -- government-owned as well as private -- be profitable.

6 Concluding Comments

> What has worked for Japan is what works everywhere: thrift, honesty, hard work, education, property rights, a willingness to sacrifice for tomorrow, and strong families that take good care of children. (Rauch 1992, p. 110).

There is no magic to Japan's economic and financial success. The Japanese financial system and its main bank system have evolved over the past 40 years and more in response to economic development and growth, occasional profound shocks, and the deepening of financial markets and financial intermediation. The systems also reflect basic government decisions about the appropriate financial structure and the financial policies to achieve broader developmental objectives and to support the financial system. For the developing market economies and the transforming socialist economies, Japanese experiences of early postwar and the high growth era to the early 1970s are particularly relevant and useful.

The problems and difficulties the Japanese financial system and its banks face in the 1990s in the aftermath of the bursting of the speculative asset boom bubble of 1986-90 do not undermine the fundamental lessons of the Japanese case. What that experience demonstrates is that even strong systems and institutions, not only banks but their regulators, can fall prey to collective myopia, and that greed in periods of speculative mania can outweigh rational, conservative calculation of project viability, borrower creditworthiness, and collateral value.

For policy purposes in other countries, understanding of Japanese finance should be at three levels: how the Japanese system operated; within it, how the banking system operated; and within that, how the main bank system of close and special relationships with large industrial enterprises operated. The lessons are both positive and cautionary.

While the minimal package of institutions and policies necessary for an effective transfer of the Japanese main bank system cannot be precisely specified, as a practical policy matter that may not be necessary. A great deal depends on the financial architecture and financial policies being pursued in the transferring country. Very few are now pursuing policies whereby interest rates are market-determined, entry is relatively easy, a bond issue market is encouraged, and financial market competition is vigorous. Although there is a debate in principle over the benefits and costs of Japanese policies of low interest rates, repression of the bond market, and restrictions on competition, from the perspective of developing market economies and the TSEs the important points are that the Japanese degree of financial repression was modest, real interest rates and other incentives were positive, there was considerable competition, credit allocation was done by objective, efficiency-based criteria without substantial outside interference, and corruption was low.

The most important lesson from this study is that the Japanese main bank system is not only a relevant and useful model for large industrial enterprise finance, it may well be better for developing market economies and transforming socialist economies than other models.

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